THE TYPOGRAPHIC TREASURES IN EUROPE

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TREASURES IN EUROPE

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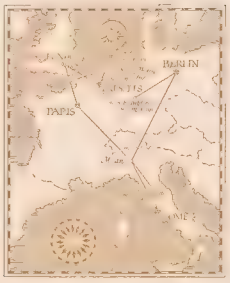
CHRISTOPHER PLANTIN
(CHRISTOPHORUS PLANTINUS)
From a Wood-engraving in Chiaroscuro
by Edward Pellens

THE TYPOGRAPHIC TREASURES IN EUROPE

And a Study of Contemporaneous Book Production in Great Britain, France, Italy, Germany, Holland and Belgium, with an Addendum by J. W. Muller Giving the Principal Dates and Personages in Printing History



BY EDWARD EVERETT BARTLETT

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PREFACE

PREFACE

IN the course of European journeys on typographical missions, it has been my fortune to have access, often of unusual nature, to the great examples of printing that all book-lovers long to see. It would be pleasant, but hardly important, to enlarge on the personal enjoyment derived from these experiences; what I wish to discuss here is the value of the opportunities to me as a printer. From every study of a European collection I have returned better equipped for my profession. As the practical benefits accumulate, I feel more acutely that such study, which should be for every printer, is in fact a privilege limited to the few men able to spend the necessary time abroad. The question is dominant in my mind: "What can we in America do to give our craftsmen the knowledge and inspiration to be obtained from these examples of the best that the art of book-making has achieved?" It is an abnormal fact that the printing profession in America is poorer in illustrative educational examples than is any other of the creative arts. From the beginning of his studies, the young architect has drawings, prints, photographs and other replicas of every style and of almost every monument of architecture. The painter, the designer and the sculptor, aside from direct access to galleries, are served with reproductions of practically every important example of their art in the world. The young printer in America has none. Occasionally an enthusiastic printer reproduces a title-page or other part of a fine old book, and circulates it as freely among his colleagues as its cost permits; now and then trade periodicals do the same; once in a long while a printing apprentice may see, and possibly handle, some of the great books themselves, through favor of a public library or a generous private collector; but all these opportunities are so rare that we must dismiss them as negligible for general education. Most of the young men whom we are trying to train never have seen the masterpieces of the art which they are studying, and, as the situation is now, they never will see them. Such reproductions as are issued are not only too few for effective service, but they lack the authority which educational material must have; they do not necessarily represent well-chosen examples of early printing; they are not necessarily good replicas; indeed, while some of our eminent American printers have produced a few really noteworthy specimens, a great proportion of the alleged reproductions are not replicas of the original pages at all, but simply reproductions of previous reproductions, so often repeated that the quality and the very significance of the original masterpiece are quite extinguished. All this random material must be dismissed from serious consideration for education; and we must similarly dismiss the few volumes de luxe of reproductions which cost so much that only a few printing establishments

can afford to possess them. Yet nothing is so important as a really systematic and authoritative supply of fine examples. For years the printing industry has struggled with the serious problem of training apprentices. Craftsmanship demands inspiration, and inspiration can not be created, though it can be aided, by training. Its source must be found, as it has been found in every age, in every art and every craft, in the good examples of what has been done by the masters. We must have such examples not only to inspire our young craftsmen, but to inspire young men of the right kind to enter the printing profession. The industry can not advance as art (or in the long run even as industry) if it must depend on haphazard entrance of youngsters who choose printing merely as a good trade and are quite indifferent to its appeal as a creative profession. I think that we have made the mistake of assuming that our students can, if they wish, study the printed masterpieces in the public libraries. It will be well for us to recognize this as a delusion. The collections in American libraries are comparatively small, rarely of sufficient scope, and they are neither intended nor selected for the apprentice in printing; the books are too valuable to be accessible to any except a limited few. So magnificent a collection as the J. Pierpont Morgan Library which has been given by the present Mr. Morgan to the city of New York, never can be thrown open to general use. We must recognize also that the flow of great early printed books to America has stopped. Europe, which long failed to view its books as national possessions equal in worth to its paintings and sculptures, is no longer indifferent. Europe intends to remain the storehouse of the world's typographical treasures; only the most desperate need could today induce a national or state library to part with a single good example, and if, in an isolated case, such a sale were to occur, the price exacted would be enormous; as a matter of fact, the people and their governments are at the point where they are not willing to see even a privately owned example go to a foreign country. This refreshed zeal for protecting a great inheritance is not narrow or selfish. In England, France, Germany, Italy, Holland and Belgium I found an equal zeal for making the treasure useful to the world. Should the American printing industry wish to establish an institution for obtaining replicas to serve the printers on this hemisphere, the libraries and museums of Europe can be counted on for hearty co-operation. There should be such an institution: a museum to serve North America as the Plantin Museum ought to serve Europe; that is, a center at which masterpieces could be freely inspected, and from which copies of them could be circulated, so that the most remote and humble shop might have the opportunity to know and study what our art has accomplished in its great past and, therefore, what we of today can and should accomplish.

THE AUTHOR

INTRODUCTION

INTRODUCTION

IT is customary to speak of printing as an art of marvelous development in the comparatively few centuries that have elapsed since the first book was printed with types. The statement is true in so far as it refers to equipments and processes that are at command of the modern printer. Few industries have been more favored by inventiveness and mechanical progress. The difference between the roadside smithy of the fifteenth century and the metallurgical plants of today is greater in scale but no greater in fact than the difference between the little shop of Gutenberg in Mainz and the printing establishments of modern Europe and America. But the art of the book (and the principle of the book-page is a fundamental principle of all printing) has not so developed. Its history is a history of incessantly repeated loss and re-establishment of quality; there has been no time when printing as a fine art has not been challenged by printing as a trade conceived in its ignoble term, sans craftsmanship, sans even trade ideals. Nothing can be more absurd than to ascribe these periodic retrogressions of the art to changes in economic conditions or to the invasion of modern machinery. Long before the sixteenth century ended, printers working under the same economic conditions as their great predecessors of the Rhine and of Venice, with the same guild systems from which to draw workers, with the same appliances, produced books that were as poor as any book produced in later periods of degraded printing. Their books were poor, not because they were printed with primitive equipments, but for the same reason that applies to a poor modern book printed on a splendid modern press. The Gutenberg Bible, the first book, printed on a wooden screw-press, with the first or nearly the first types ever designed and cast, still stands as one of the finest printed books. It does not owe that quality to the fact that it was produced tediously with crude equipment and with the pain of infinite labor. It is what it is, because it was created with thorough understanding of what a book must be—a utility and a work of art. The book that is either, to the exclusion of the other, is not a good book. All the "periods" of printing have in fact been brought about by alternate forgetfulness and revival of this principle. There have been periods when not the ugly book but the over-decorated book injured the art. The error of over-beautification did not, it is true, degrade book art; but while its influence lasted it diverted the art from its right direction. None of these periodic errors can be ascribed to conditions related in any way to the exterior circumstances of the time. To say that modern processes and modern equipments make the production of an inferior book easy, is to turn the argument upside down. Surely it is "easier" to produce poor results with poor equipment than with good. In the

twentieth century, as in the fifteenth and sixteenth, the whole issue is that of applying what is vaguely called "taste"—that conscious art which never loses sight of the purpose to be attained, and which unites knowledge, training and talent. It is not enough that the printer alone possess this understanding. In no age has a degradation of the book been due alone to degradation of the printing craft. No student can go far in the history of any debased book period without recognizing that publishers and authors were jointly to blame—that they were negligent to a degree that would seem incredible if contemporaneous evidence were not before us to prove it. During more than thirty years in fields of publishing, from newspapers to books, I have dealt with few authors who had the least knowledge, or seemed in the least to care, how their work was to appear in print; and I myself must confess to such a lack of interest in my early years. As an editor, I have found that the general tendency in publishing offices is to consider the whole cycle of printed production as a single step from the edited manuscript to the press. Design of pages and typographic execution are all too often considered merely technical matters to be accomplished in some more or less mechanical way by the "printing force." Those editors and publishers who are exceptions to this rule will bear me out in the assertion that they *are* exceptions. The printer (again with certain bright exceptions) has accepted the position thus thrust upon him. He does not even expect what should be his unquestioned right—an opportunity to discuss the significance and spirit of a manuscript with author, editor and publisher. The manuscript comes to him as a frigid mass of paper, and unless he be a poet of his craft, the typographical composition is bound to be uninspired. Design does not grow from manipulation. It is born in the spirit. About ten years ago it became my privilege—esteemed at its full value only slowly as my understanding grew—to become an associate of a printer who has been laboring for many years to inspire men with his own feeling for the dignity of printing. It has been a labor of love, for he himself has long held a position which is secure. In these ten years, much has been accomplished. The group which, under his direction, has had the happiness of co-operating with other groups and individuals zealous for the same cause, feels that it is not too much to say that a renaissance of printing has begun. The author of this book, in which I consider it an honor to be named as collaborator, is, I believe, entitled to a not subordinate place as one of those instrumental in this accomplishment.

J. W. M.

THE TYPOGRAPHIC TREASURES IN EUROPE

THE TYPOGRAPHIC TREASURES IN EUROPE

AND A STUDY OF CONTEMPORANEOUS BOOK PRODUCTION IN GREAT BRITAIN AND ON THE CONTINENT, WITH NOTES ON RECENT TYPOGRAPHIC ACTIVITIES

THERE is no doubt that for a long time to come, perhaps always, national groupings will tend to produce differences between the typographies of nations. I do not refer to such obvious contrasts as are caused by the preference for Gothic in some lands as against Roman in others. Nor am I thinking of those differences due to temporary nationalistic or racial fashions, whose chief characteristic too often is impatient abandonment of the fundamental rules of every art. The differences that are really important and instructive are those that we perceive when we compare national productions which are equally sound, equally constructed in obedience to recognized principles. An English book, a French book and a German book, similar in format, with one and the same simple use of simple types (indeed, often using the same or practically the same face), will still be so unlike that the utterly untrained eye of the layman can not fail to perceive it. Minute touches of national taste, delicate nuances of method, succeed in making the same typographic materials produce strikingly different results, each beautiful, each correct, each made in accordance with the same good rules. There could be no more graphic lesson

for the printer who believes that to get original typographic quality into his work, he must use "original" or "distinctive" type or otherwise depart from established rules of book-design. The error has found believers in every century since printing was invented, and in each case it has harmed the printer who made it his fetish. It seems to have a certain evil life of its own. The best medicine for it is a study of the various good national typographies, with parallel study of the great masterpieces of printing since the beginning. They all demonstrate the one simple truth—that the standard type forms, used with simple correctness, offer opportunity for infinite variety. With strict adherence to the accepted rules of the book, without seeking novel types, without resorting to devices differing from those always used by good printers for good books, the exercise of taste, knowledge and judgment will enable the printer of today and of the future to make each production a new one, with its own unmistakable and delightful stamp of style—which is the only "originality" that has, or ever will have, vitality.

If any evidence were needed to demonstrate to us of the United States and Canada that we were on the right track when we established the classic types as our standard, it would be in the fact that the leading printers and typographers of Europe are today in accord on this fundamental principle. They seek their renewed inspiration from those pure letter-forms that belong to all men and all ages and that will always be as "modern" as they are old.

TYPOGRAPHIC REFINEMENT IN GREAT BRITAIN

The campaign of the past ten years for typographic purity in North America has its parallel in Great Britain, where the movement (begun there as here by what seemed a hopeless minority) has gained adherents steadily. The most easily observable result is shown in current literature and especially in the newspapers, whose advertising is of marked typographic improvement.

The growing appreciation of type by book and commercial printers is a happy change from the attitude of indifference that I found

WILLIAM CASLON

From a Drawing

by Clarence P. Hornung

in England a few years ago. Typographic purity is recognized as not simply an artist's counsel of perfection but as the fundamental value of practical printing for any of its purposes.

Credit for this revival of high artistic standards in British printing is directly due to the private and semi-private presses founded under the inspiring influence of that true creator of a modern renaissance, William Morris. Their labor for many years was indeed a labor of love. Not until the last ten or fifteen years did men appreciate what such printers and designers as Charles Ricketts, T. J. Cobden-Sanderson, Emery Walker, St. John Hornby, Lucien Pissarro, Herbert P. Horne, George W. Jones, Francis Meynell are doing for the whole printing art. Today every true printer realizes that their work was not "art for art's sake," as it was generally viewed at first, of interest to only a few bibliophiles, but that they were in fact restoring the art for all—for the men who print the most "commercial" of things as well as for the men who print books of high order.

In the beginning, particularly between 1895 and 1910, the private presses considered specially designed faces of type essential. It was an appeal to the collector of limited editions who believes that his acquisition is made more "precious" by being printed with a type that no other publisher can obtain. Fortunately, few of the private press designers sought the meretricious originality of novelty in letter form. As a group they tried, sincerely and with a high degree of success, for the simple dignity of the Roman letter designed by the great fifteenth century printers of Venice.

It is instructive to note that those private press types which have succeeded in holding favor are those which stand today as having most nearly attained the old classic quality, and which are most nearly free from injected "personality." It is equally instructive to note that these specially designed faces have not led to any important production of similar special forms for general use.

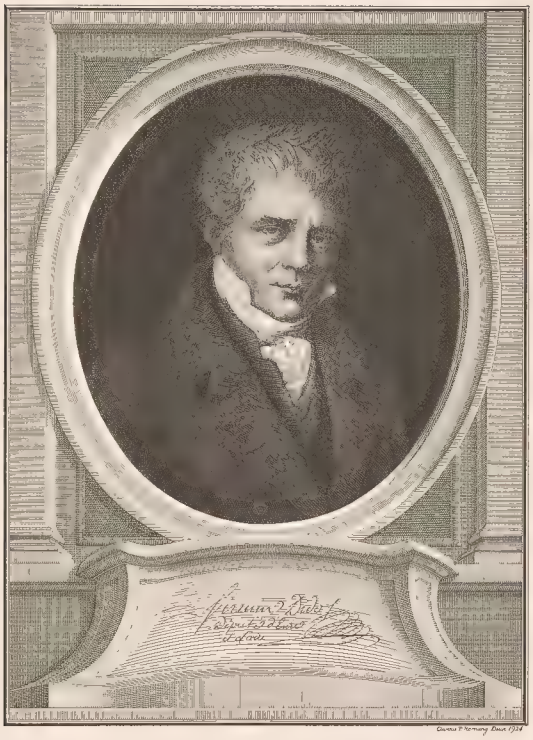
William Morris founded the Kelmscott Press in 1891. It was conducted in Kelmscott Manor, an Elizabethan house on the upper Thames River, where he had established himself in 1872. Private presses following the Morris leadership were founded as follows: Ashendene Press, 1895; Vale Press, 1896; Doves Press, 1900; Eragny Press, 1903.

Their great service has been to demonstrate to printers and type-founders that the best of the early Roman letters still furnish our best foundation for modern type-design. Students today recognize that the important merit of the private press books does not come from specially designed types. The books are good because the men who made them understood the art of the book. In their hands any perfectly designed standard type would have produced distinguished results. Typography demands good types, not unique types.

Recognition of this fact has been the most powerful single factor in the really great progress that printing has made in the last ten years. In this general progress, the commercial printer has been the leader. Though a commercial printer myself, I say it with regret, for the publishers and printers of purely literary works should have been foremost in book art. I hope earnestly that the time is coming when every book for general reading, important or unimportant, will again be an example of that art—not by being sumptuous, but because it is designed with understanding of its content and spirit.

At this time, however, it is the business man (particularly the business man of the United States and of England) who encourages high standards of typography and printing. He does it, to be sure, for purely practical reasons but the result has been to keep the art of the well-designed book page alive; for "commercial" printing is in no fundamental sense different from "book printing." Every body of composed type is in principle of design a book page. The typographic artist who is competent to design a good title-page or a good page of text is sure to be able to compose any "commercial" printing well. Herein lies explanation of the fact that many of the best object lessons in good printing reach the general public today in the form of commercial literature.

Though laying stress on the encouragement that commercial art receives in the English-speaking nations, I do not ignore the fact that the Continent produces masterpieces of commercial art. Latin, Teutonic and Slav poster work is eminent. For catalogues and similar matter, such French firms as Draeger Frères are entitled to high place in any international survey. But it remains true that on the Continent only the progressive minority of business men as yet supports genuine art in printing, while in Great Britain and the United States, the latter particularly, commerce and industry as a whole have learned that beauty has a concrete practical value.



FIRMIN DIDOT

From a Drawing

by Clarence P. Hornung

The best of the commercial printers demonstrate daily what can be done with the good standard faces. In England, as in the United States, such good designs as the letter given to the world by William Caslon are in high favor. Produced in 1722 and revived in 1844, it remains all that type ought to be, not disputing for place with other recognized standard faces, but with them forming a group sufficient in the hands of craftsmen for almost all purposes.

In England it retains leadership, and Scotch Roman also holds its high and rightful place. Cheltenham, the other leading face, is perhaps the one that may be called the most nearly international in point of wide use, for it is almost equally popular in North America, Great Britain, France, Germany, Italy, Holland and Belgium, especially for newspapers.

Another type held in high regard by British printers is the Fell type owned and used by the Oxford University Press. It is a Dutch face, owing its name to the fact that it was purchased by Dr. John Fell, then Dean of Christ Church, later Lord Bishop of Oxford. He began his purchases in 1668, and between that time and 1672, personally and through agents he not only accumulated full fonts of type, but a great assortment of punches and matrices to insure the production of new types whenever needed. It is fairly well established that the material was the product of Christoffel Van Dijk (also spelled "Dijck" and "Dyck") and Dirck Voskens of Amsterdam who cut types for the Elzevirs and for many other continental printers of the period. In 1672 Dr. Fell presented the complete

The history of the introduction, disappearance and revival of Caslon's type is eloquent evidence of the tendency of industrial art to recede from its own high levels. There had been a long period of shabby printing when William Bowyer encouraged Caslon to cut the Roman letters which he used in 1726 in a sumptuous edition of John Selden's works. They were received with actual enthusiasm. Even the untrained eye could perceive that a new and vivid character had been brought into English typography. They inspired type-designers on the Continent and became the favorite type of Colonial America. Yet the printing industry allowed itself to forget them, and to accept a reign of miscellaneous types, mostly base. After they were resurrected in 1844 by a great publisher, William Pickering, with the invaluable aid of the Whittinghams of the famous Chiswick Press, their high quality was recognized again instantly. Why, then, were these superb letter-forms ever suffered to fall into oblivion? Because in every industrial art there is a proportion of uninspired, stolid production which tends, unwittingly, blindly, but unremittingly, to lower all standards to its own level of comprehension and ability.

equipment to Oxford University Press. After being used for some time it was stored away and forgotten. It was covered with the dust of two centuries when it was resurrected by the Reverend C. H. O. Daniel, who, in 1845, had started a little private press at Frome which he afterward continued at Oxford. His first use of the Fell type was in 1877, when he reprinted a seventeenth century sermon. Since then it has been utilized for many of the Oxford publications.

Among other types which I found superior to the average production is a Baskerville, produced by Stephenson, Blake & Company and duplicated in excellent style in outline shaded. Another shaded face is of German origin, from the Klingspor Schriftgiesserei of Offenbach, one of Germany's very good foundries. It is called Narciss and enjoys vogue on the Continent. British printers use also some French types, there being considerable though scattered use of the types modelled upon the copper-plate lettering of Nicolas Cochin, also a French outline face called Moreau-le-Jeune, which, like the Cochin designs, is the product of Deberny & Peignot of Paris, a firm of type-founders whose work has had an influence throughout Europe that compels further reference.

England's printers joined in a fine tribute rendered in London in 1924 to George W. Jones in honor of his fiftieth anniversary in the printing industry. As one of the distinguished speakers said, "Mr. Jones is an artist whose medium of expression is type." The recognition given to him and to others who are bringing taste and sound

John Baskerville's types present another instance of a distinguished, correct letter-design, universally recognized at the time, yet allowed to fall into almost complete desuetude. The printing which he did with the types designed and cast by himself made him so famous throughout the world that during the last half of the eighteenth century it became customary to compare a printer with Baskerville if the highest compliment was to be paid. Curiously enough, France remained appreciative of his types long after Great Britain had turned to other designs. When he died in 1775, his types were sold to France and passed entirely from British possession. They were used in Paris (1784-1789) to print two editions, in 70 volumes 8vo and 92 volumes 12mo respectively, of Voltaire's works. We find them again in a broadside of 1789, where they are offered for sale with many laudatory remarks, and they were used to print official documents during the French Revolution. Power and elegance are combined in unusual degree in the true Baskerville letter.

George W. Jones has been printing since 1889 in the Ward of Farringdon Without, which is the ward where Wynkyn De Worde set up his press after Caxton's death.

technique back into British typography speaks well for the future. His work, bearing as imprint *The Sign of the Dolphin*, is known to those American printers who study good foreign production. His long printing career is a striking illustration of the real secret of quality. He began when appliances were few and almost primitive. In his time, hundreds of improved processes and methods have come in. He has seen, and has adopted, swift presses, swift composing machines. In the past few years he has done work with such a modern facility as the linotype, which demonstrates how the true craftsman makes modern machineries his instruments for the exercise of his art.

FRENCH INFLUENCE ON EUROPEAN TYPOGRAPHY

In French typography, the tendency is to return to the classic forms, retaining, however, certain French characteristics, with a mixture of those types which satisfy the fugitive demand for the flamboyant. As goes France typographically, so goes a considerable part of Europe, for French typography exercises powerful influence over many of the continental nations, and almost, if not quite, dominates those neighbors who use French as a familiar language.

As in England, America and Germany, the men who are conceded leaders are turning with renewed interest to the history and methods of the great type-designers and printers of the great periods. The current technical literature on typography and book-making refers to the great names of the past—Estienne, Tory, De Tournes, Colines, Kerver, Didot, Fournier. It is realized afresh that in typography, as in every other art, progress is possible only by emulating the masters, not by denying them.

An interesting topic of discussion is revaluation of the place held by the Didot family which contributed so many members to French type-founding, printing and publishing that study of their period is an adventure in genealogy. Their work, and particularly that of Firmin and Pierre (l'ainé), sons of François Ambroise, and grandsons of François "the founder," has been extravagantly eulogized and fiercely condemned. Neither verdict was just, and neither

contributed to understanding and improvement of type-design or printing. Thus the Racine printed by Pierre and Firmin with types cut by Firmin, emphatically was not "the most perfect typographical production of any country or any age," as was the French verdict at the time; but denial of supereminence must not involve denial of taste and knowledge, which the Didots brought in ample measure to book art. In the period following the French Revolution, Didot types or designs based on them were dominant throughout Europe. Expressing the French deification of the "antique" to which France (and with it all other continental countries) had surrendered itself in the early nineteenth century, the Didot types and manner brought an attenuated elegance to the book, so bloodless, so frigidly precise, that we cannot today conceive how it could have been admired, unless we bear in mind that all the arts of the time were under, and catered to, the same infatuation. It involved no debasement of art, but rather the devitalization that attends every surrender of any art to a fad. The enormous vogue of the extreme, slender, meticulous, brilliant Didot types, and their decline from popularity, are object lessons to all who are not convinced of this truth. The Didots were not inferior printers, but great printers. They were great type-designers. Even their talent could not give life to a fad.

French type-founding, under the leadership of men who have drawn their lesson from history, is proceeding today in a manner more nearly correct; and, unlike the roads of proverb, which all lead to Rome, most of the modern typographic roads that I discovered, outside of the Germanic influence, led to France. Many of them led

Like the preceding gay, ornate, extravagant rococo period, the cult of the Greek and Roman antique demonstrated the overwhelming influence of French art and thought over the continental Europe of the time. Despite raging political and racial enmities, passion for the French fashion swept all circles of society in the other continental nations. Both periods produced a great art, or at least great achievements. Speaking specifically of books, they have left many examples without which we should be poorer. But on the whole, both periods reversed the relations of the book and of pictorial art. They made the book a casket, often a splendid one, for the display of the art of illustrator and decorator, engraver and etcher. Even where typography was not deliberately neglected, as it generally was, it still was never recognized as being the essential substance. Thus in even the most admirable of these works, we miss something. We feel that they belong to an art gallery or museum, not to a library.

to Paris, and largely to one foundry—that of Deberny & Peignot. I found their influence almost everywhere, and I greatly admired much of their product, especially a face named Astrée, one of the most desirable types for special uses that has been designed in our time, possessing an elegance that has genuine quality.

The general tendency is decidedly for the lighter faces—Elzevir, Didot, Garamond, and the types already mentioned as modelled on copper-plate designs of Nicolas Cochin. Many of the French Garamond types are in no sense like the original. One that is issued under the name is more like an Old Style Antique or Bookman. The face which properly bears the name is the Garamond used in the work of the Imprimerie Royale (now the Imprimerie Nationale), established by Cardinal Richelieu under Louis XIII in 1640, about one hundred years after Garamond cut the types that are generally referred to as Caractères de l'Université. Two years after establishment of the royal printery, they were used for a book written by Richelieu himself; but in 1693, under Louis XIV, Philippe Granjean began cutting the royal fonts, Romain du Roi, which became the favorites for a long period.

FRENCH AND AMERICAN INFLUENCE ON ITALIAN PRINTING

It is most interesting to consider the influence which contributed to the decline of printing in Italy from its height of achievement. When it began to follow the grand manner of the architecture of Bernini and of the Baroque cult, with profuse use of copper-plates and wood-blocks and badly assorted types, there ensued a decadent period which continued pretty much to the time of Bodoni.

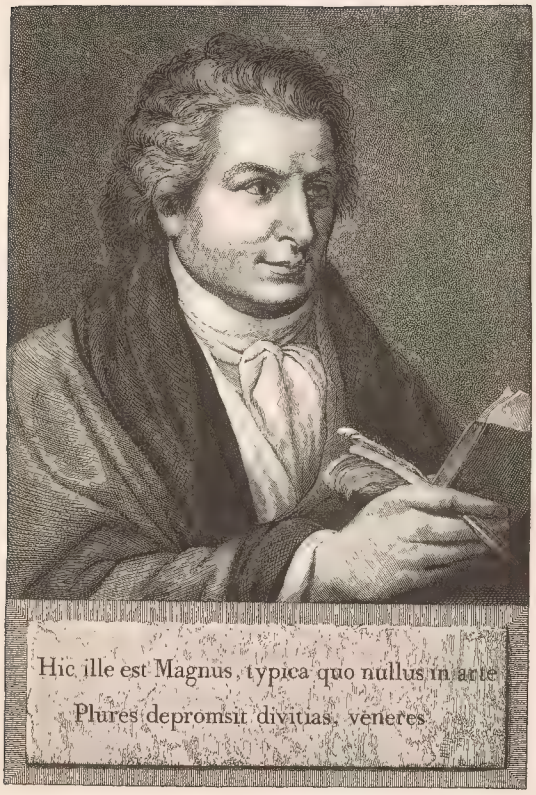
It is only in the past few years that the value and correct place of Bodoni types in contemporary printing have become fully understood. In previous decades those typographers who had learned to recognize the faults of the types of the extreme Didot school, with their dazzling combination of hair lines and thick strokes, hastily imputed the same fault to Bodoni, not perceiving that his genius had eliminated the faults and added virtues. As Updike says in his PRINTING TYPES: "It can be utilized for short addresses, circulars and advertising with great success—as in the charming use of it by Mr. T. M. Cleland. To printer-designers as skillful as Cleland it may be recommended." Mr. Cleland's use of the face and his modern adaptation of the Bodoni manner (worked out in a style emphatically his own) should be studied by all who would understand how desirable this type is in modern printing when used in its place and composed as it should be.

Bodoni, in his earlier work, while under the influence of Didot and Fournier, produced types and printing of the highest order. His best period was attained when he cut those types and ornaments for which he deserves all the praise that has been given to him.

Over the period that followed we may draw a veil. A decline affecting the printing art of all Europe and of America did not spare Italy, the country which gave us beautiful manuscript letters and beautiful type-letters. But Italy never has lost her fine consciousness of being guardian of a world's treasure; and the Italian printer has the fortune of not only living amid the records of art, but of working in a national environment of veneration for them. It may be expected that he will play his part in the general revival. I quote a suggestive phrase from a recent communication by Raffaello Bertieri, publisher of *Il Risorgimento Grafico*, the periodical which is doing so much for Italian typography: "It is already a beautiful conquest for the art of the press and for humanity to be able to claim as ideal, common and universal property, certain forms which originally belonged to a specific Latin country."

At present, Italian printers are studying the best of American work with interest and appreciation. The liking for Benedictine Book appears to be general. As in France, the tendency is toward the lighter faces, and Cheltenham is a favorite. As a natural phase of every revival, the type-founders are seeking to give Italian characteristics to their letter-forms, a movement which may in time minimize the influence of French typographical practise. This influence seems to me observable in Italian contemporary printing.

If the road of modern European typography leads to France, the road of every printer in the world assuredly should lead to Rome, to the great Vatican Printing Office and the wonderful Library. If any work representative of ecclesiastical printing since its invention is not there, I do not know what it could be. This necessarily means most of the incunabula and many fine examples of later period, since churchly literature offered so much encouragement to the early printers. Nor was the interest in literature limited narrowly to works



GIAMBATTISTA BODONI

From Manuale Tipografico, Bodoni

of ecclesiastical character, for monastic scholars did not neglect the Latin and Greek philosophers and other classics. I am tempted to say that no other collection compares with this as a world's treasure.

In this institution is a man, Commendatore Pasquale Scotti, who not only loves and understands the great works of the past, but himself holds an eminent place in typography and printing as the head of the Vatican Printing Office.

With Monsignore Count Stanislao Le Grelle, Scrittore Onerario of the Vatican Library, whose enthusiasm over the books seemed as if it were as rare and exquisite a privilege to him as it was to me, I pored over and fondled such possessions as the Speyer, Ratdolt, Jenson and Aldus books with other examples of the golden period of Venice; the first book printed in Italy; the great Bibles of the fifteenth and sixteenth centuries; examples of incunabula from presses in all the countries which knew the printing press in that period; the best of the Florentine books; the books of the Stampa Vaticana; volumes of which any one would furnish subject-matter for many analytical essays and practical suggestions for today's printing.

ROMAN VERSUS GOTHIC IN GERMANY

In Germany, as in other countries, the demand for more refined Roman faces is coming—not so fast, perhaps, because of industrial and political conditions, but in evidence nevertheless, and finding voice through the better presses and publishing houses.

An extraordinary feature of German type-founding is the almost continuous production of new letter-designs. The foundries vie with each other. One cannot open a technical periodical without finding announcements of new type-faces. The rivalry keeps many type-designers busy, and a large part of the typographical discussion in the trade publications is by them. Eckmann, Behrens, Tiemann, Koch and Hupp, who have produced the most famous types of the Klingspor foundry, and Ehmcke and Kleukens, who are chiefly associated with Stempel, are perhaps the best known among the German designers. Other prominent ones are Bernhard and Weiss, designers

for the Flinsch-Bauer foundry, Schneidler who designs for Schelter and Giesecke, and Czeschka and Steiner-Prag who work largely for Genzsch and Heyse. Many are artists of reputation in painting, architecture and similar fields. Others are specialists in type, whose ability and knowledge demand recognition even from one who must, as I do, maintain that letter-design whose main motive is novelty or variety is injurious to that maintenance of typographic purity which is so essential.

In North America, where printing as both an art and an industry has at last recovered from a debauch of "novelty type" production, it is hardly necessary to repeat how utterly such striving for novelty robs the art of consistent direction, and how it must end finally in every printer following his own will o' the wisp of personal expression into his own swamp, where he must flounder and perish.

Personal expression, or, as it is called nowadays, "self-expression" is the spirit of most of these modern German types. I venture to touch, with all respect and good will, on what I think has been a fundamental factor of German creativeness for many years—the vast dominance which Goethe's thought and philosophy exercise over the German thinker. His philosophy of individualism in thought

Professors Kleukens and Ehmcke were among the leaders in the revival of German art of the book, and remain among the leaders in activity and in quality of production. With Georg Belwe they established the Steglitzer Werkstatt in 1900, with decisive effect on the whole national tendency. In 1906 Professor F. W. Kleukens with his brother Christian undertook direction of the private Ernst Ludwig Presse, endowed by the Grand Duke Ernst Ludwig. This press, established in Darmstadt, soon became famous for its sumptuous editions of classical and modern works, all of which are characterized by the brilliant talent of Kleukens as typographic designer, colorist, illustrator and decorator.

It goes without saying that the personality of the worker does and must determine the merit of the final achievement. But the impulse of the great artist for self-expression is in the main unconscious, and even when conscious is never blatant. The great harm in the contemporary preaching of self-expression is that it encourages the poorly equipped artist and craftsman to ignore his defects. Even in continental Europe, where the opportunities for technical training are plentiful and excellent, the cult is responsible for much sad work and for the ruin of many young talents. In the United States, where we are only beginning to institute such training on a scale commensurate with our national stature, we are witnessing a veritable mob carnival of professional tyros and amateurs arm in arm. It isindeed a poor American village today that lacks its own poet, its own sculptor, painter or musician, and, most frightful for posterity, its own architect—all born over-night of self-expression with no trailing rags of knowledge encumbering them.

JOHANNES GUTENBERG
(JEAN GUTENBERG)
From the Medal
by Léon Deschamps
Issued by the French Government Mint

and expression has moulded German culture and German life, and I think there is forgetfulness of his own significant remark that his first inspiration for beauty came from his contemplation of classic art whose examples surrounded him in his ancestral home.

The German type-designs, for example, are advertised by the founders in terms of the man who designed them. Their eulogists praise them largely as personal achievements. An impressive amount of talent goes into this work. Considered purely as ornamental design, many of them have spirit and grace to please any artist's eye. My criticism is made only from the view-point of typography. As I studied this great mass of earnest creative effort, I could but wish that the skill and thoroughness might be directed in unity of purpose toward reinstating the classic forms of both Roman and Germanic. The most valuable service that could be done for Germanic as a beautiful ornamental form would be to so purify it of florescence as to restore its older legibility and increase it. In the field of the Roman face, the abundant talent in German type-design should succeed in giving the national typography noble Roman types, with the old clear, serene power in place of the too tender and the too forcible, both of which tendencies are noticeable in German typographic design today, and which are caused largely by the strife for novelty.

In Germany, as in America, there is universal recognition of the fact that the modern art of the book is indebted to William Morris for its present right direction. In the perspective of today, the German book-designer knows as we do, that the rich decorative features of his work were, after all, only expressions of his own creativeness as an artist; and that the great service he gave us was the rediscovery of the classic treatment of the book as a complete whole, in which type, decoration, design, illustration, paper, margin, ink, presswork and binding are all essential factors of the one art. There is such hearty assent to this principle, that in Germany the unity of the arts of the book may be called the leading article of faith.

Aside from this, Germany's leading typographic issue remains what it has always been in modern times—the struggle between the

Germanic face and the Roman. Although the superior legibility of Roman is not seriously denied, and though its utility for international printing is obvious, the sentiment behind the Germanic is so powerful that there is no probability, perhaps no possibility, of any early sweeping change. The logic of events would seem to point to the final ascendancy (if only on grounds of practical utility) of the Roman face; but the logic of events is slow, and for many years Germany will remain a land of dual typography, with those Germanic styles developed from the original Gothic and known as Fraktur and Schwabacher in leading place.

When we turn from these fundamental matters to daily practise, we find in Germany, as in all other countries, an encouraging amount of distinguished work, and much work that should not be done at all. Such establishments as the Stempel type-foundry (Schriftgiesserei D. Stempel) of Frankfort command admiration. The Stempel institution is one of the most important type-foundries in continental Europe. More impressive than its magnitude is the thoroughness of its work and the many accomplished men who serve it with real understanding of typography and printing.

A member of this organization, Gustav Mori, has devoted himself to research into type-design and type-founding, and is one of the first authorities on the history of German printing. A large amount of current American knowledge about early European types and printing has been drawn from his writings. In 1924-1925 he compiled a work extraordinarily complete on the history of the German type-founding trade. The first volume, issued in 1924, recorded the entire development of type-founding in South Germany. The second, issued in 1925, narrates the history of type-founding in and

Our customary term "Gothic" for these medieval European type forms is doubly undesirable. In the first place, the term does not accurately relate to either their history or their form. In this respect, the general European practise of referring to them as "mediæval" while the Roman type are called "antiqua," is far more desirable. In the second place, the term is confusing to American printers because there is a trade-term "Gothic" which is applied to a Roman face of special design. This application of the name is an example of many trade-terms which are invented without authority or reason, and become sources of permanent confusion and inaccuracy in their industries.

around Frankfort (Frankfurt-am-Main) where so great a part was played in the development of the art. He has a wealth of material, and knowledge that is encyclopaedic. His data, partly of his own collection, and partly loaned to him, include very rare and most beautiful specimen sheets that are almost beyond price. One that I examined is the sheet which Konrad Berner, a successor of Christian Egenolff, issued in 1592. It shows the original Garamond cut in about 1540, the punches of which later were acquired by Christian Egenolff himself or his heirs and successors (a type-founding line which later became the Lutheran family foundry). In my judgment, these Roman characters have never been surpassed.

The Stempel institution, besides producing its own types, makes the German linotype matrices for Mergenthaler Setzmaschinen-Fabrik of Berlin.

Another eminent type-foundry is the Klingspor Schriftgiesserei in Offenbach a. M., whose types are of high order. The Narciss, which I mention as being used in Great Britain, is their production, and it enjoys considerable popularity among the best printers in France as well as elsewhere on the Continent. It is a good type—free from fads. They have several other good types, of certain Germanesque charm and merit, which stamp them as possessing taste of an unusual order among German founders. Their specimen sheets are excellent, reflecting taste in printing that is of the true German variety. Though few of these types could find a place in American printing, they are strongly individualistic in character and worth study.

With Mr. Stempel, Dr. Wolf, Gustav Mori and Dr. Ruppel I visited Mainz to inspect the Gutenberg Museum and to consider its

The Konrad Berner specimen sheet has been reproduced in facsimile by the Stempel establishment, and thus is available for study by the printers of all the world.

Since its foundation the research supported by the Gutenberg Museum has produced a series of highly valuable papers dealing with the earliest Donatus and Bible types and with the other types used by various printers of the incunabula period. Among these are extremely complete analytical descriptions of the Catholicon and of the Bamberg books printed by Pfister. The beautiful Missals printed by Fust and Schöffer and by Schöffer are the subject of a particularly interesting report illustrated with excellent facsimiles. These publications, issued through the Gutenberg-Gesellschaft, are furnished to the members of that society throughout the world.

future development. Founded under inspiration of the fifth Gutenberg centenary, it was conceived as an international memorial which should serve printing all over the world. The famous University Library contributed its treasures. The city of Mainz volunteered assistance. German printers anticipated no difficulty in making the institution all that they had dreamed; but in the last difficult years it has been possible only by many personal sacrifices to support it at all. I found that despite the crisis through which it has had to pass, it has been maintained, and that its directors have not lost their inspiration for making it a symbol for unity of the printing profession. Indeed, they feel that such an effort is worth more now than ever before, and it is a pleasure to record that, as this book is preparing for press, a movement has begun in the United States to aid in realizing the vision. I am one of those who believe that the arts and sciences are by their nature and by their understanding fitted to be the real leaders in world peace, and of these the art of printing could exert a power greater than that of statesmen and governments.

TYPOGRAPHY IN HOLLAND

The types that are most used for contemporaneous printing in Holland are a Medieval face ("Mediaeval" being one of the styles of the Germanic or Gothic face) and various Antiqua faces, by which name the Roman is known in the non-Latin countries of the Continent. Cheltenham is one of these latter, and appears to enjoy as large a sale among Dutch printers as in the English-speaking and Latin countries which I have already mentioned.

To every printer who visits Europe I recommend a visit to the Museum Enschedé in Haarlem. It contains a great deal of typographic interest and importance to the historical and educational side of the art, arranged more directly for practical study by printers than in many of the great public museums; and it has an advantage in being directed by men who are not only interested in the historical and literary side but who are typographical experts and practical type-founders with a long family record in the art.

The present Enschedés are direct descendants of the original Enschedés who established the firm—"Joh. Enschedé en Zonen"—in 1703. As illustrating what the museum offers, I mention only one feature shown to me by Mr. B. F. Enschedé, which I viewed with amazement. It was a showing of the development of typography in Holland, exhibiting every type-face of importance from the fifteenth century to the present day, all reprinted with new type cast from the original matrices which the Enschedé firm owns.

In Amsterdam is another typographic museum of great interest, owned by the Lettergieterij Amsterdam, Voorheen N. Tetterode, and in charge of a well-known type-designer, S. H. de Roos. It is a gem of interior decoration—a really worthy creation. Lovely restrained woodwork, quiet tapestry wall covering, and rugs of special design make it a place of charm and distinction.

The museum contains several thousand volumes, and since these are selected in conformance to exceptionally exacting standards, it was gratifying to find several American commercial printers represented. Linotype users will be interested to know that among the exhibited works is *The Manual of Linotype Typography*.

ANTWERP'S MONUMENT TO PRINTING

Belgium may well be proud of her Plantin Museum, or rather Plantin-Moretus Museum, the greatest monument in the world to the printing art. Dr. Maurice Sabbe, its director, is a fine scholar, loving the treasures that are in his keeping and sparing no labor in his zeal to record anything that relates to printing history. Being a historian and a student of literature and philosophy, it is natural that his work directs itself largely toward Christopher Plantin as poet, editor, philosopher and literary scholar, rather than to the technique of printing. To this tendency I ascribe the fact that the publications of

The Plantin Press founded by Christopher Plantin of Tours and continued under his son-in-law Jean Moeretorf (Latinized to Mpretus) remained in existence for 312 years, and at the end of that period still was in possession of the Moretus family. It ceased work in 1867 and in 1876 Edouard Moretus deeded the establishment, then known as Hotel Plantin-Moretus, to the city of Antwerp as a typographical museum and monument.

the Plantin Museum today are issued primarily for their historical content rather than as typographical examples. The stress is laid on text. As a printer and a typographer I felt this rather acutely. This monument, with its accumulation of fine incunabula and beautiful prints and types, should be not only a monument but a fountain—a fountain from which might flow examples of printing to inspire us all.

An eminent establishment, the Buschmann printing house, has served as the official printer of the Plantin Museum since 1880. Founded in 1842 by Joseph-Ernest Buschmann, a man of profound learning, it gave powerful support to the new Belgian literature of that period, introducing it to the public by means of popular editions illustrated with woodcuts. Managed after his death by his widow and then by his sons Paul and Gustave, it passed entirely into the latter's management in 1911 when Paul died. The efforts of Gustave and his two sons, who have entered the business as co-managers with him, are directed to printing rather than to publishing. Interesting work has been done in reviving sixteenth century typography side by side with productions that exhibit ultra-modern tendencies.

The general tendency of Belgian printing has been indicated in previous remarks on French influence. French style is practically native to Belgium, and the French movement toward refined classic faces is reflected there—a satisfactory point to note. In linotype faces, Cheltenham, Century, Caslon, Bodoni, Benedictine Book and Elzevir are the designs that lead in popularity.

It was my privilege to meet M. Jean Dumont, Founder and Honorary Director of the School of Typography at Brussels. M. Dumont, who is 78 years old, is the proprietor of a historic Belgian typefoundry, organized in 1816 under the name of the Fonderie de Delemer Frères. In 1835 it became the Fonderie M. J. Vanderborght, and produced, among other faces, a series of Elzevir. M. Dumont joined the organization as an apprentice boy and in 1901 it assumed the firm name A. Vanderborght and Dumont. He told me that the two punch-cutters employed by his establishment are the only ones working today at this craft in all Belgium.

In Belgium and Holland it is, of course, almost an article of faith that the invention of printing with movable metal types is to be ascribed not to Johannes Gutenberg but to Lourens Janszoon Koster (or Coster as usually spelled by us). Much of the evidence adduced is the result of astounding research and offers interesting examples of deductive reasoning. Probably the discussion will continue without end; for it seems unlikely that the great labors of the advocates of Gutenberg and Koster have left undiscovered any document with a date that might settle the question beyond dispute. The printing world may welcome every addition to the debate. Even if it be fruitless as to the specific subject, it is giving us a continual increase of knowledge about early printing—and that means an increasing perception of those great standards of book art which never become "old," and which will guide the printer of today as the beautiful manuscript book guided the men who first printed with type.

THE EUROPEAN BOOK TODAY

I doubt if many American printers and publishers are aware that a deeply interesting period of book art is in being in Europe. On the whole Continent there is a stir of fresh, vigorous life, akin to the running of sap in spring. If it were confined to the young Central European nationalities it might be explained and dismissed as a result of newly born consciousness; but it is in evidence everywhere.

Without decided direction as yet, it is alike in the different countries chiefly in passion for new achievement. It is marked by boldness and dash admirable despite many errors. The production is not always pleasing; but even when it is wholly displeasing, as much of it is, the mistakes and the violences are less mistakes of ignorance than of a spirit impatient, which in seeking a farther heaven is youthfully improvident of the glories of the old.

A tangible, material sign of it is the fact that continental publishers are no longer limiting themselves to the cheap books which existing economic conditions would still seem to prescribe. Low-price books continue to issue in large numbers, and they are well

worth American study because the best ones show what results good design and intelligent art can get out of cheap paper, cheap binding and cheap manufacture generally. Side by side with them, however, is a growing production of books that would seem expensive even to our prosperous buyers of limited editions.

The support for these in England and Germany comes from a public that has been educated to appreciate the work of the private and semi-private presses, and is willing to pay enough for a book to make a small edition profitable. In Germany the private presses have national prestige. In my last visit to Leipzig, the great city of books, I had opportunity for a reasonably complete survey of their work. Their number and significance may be gauged by the fact that the specimens of some eighteen presented themselves as being of unusual merit. Their books embodied a great variety of modern printing, all of very high order, ranging widely in utilization of processes and notable for creativeness in illustration.

Nowhere, abroad or at home, have I been so deeply impressed with a sense of co-operation and co-ordination of high aim and effort as in this city, where the student can see practically the whole German book production assembled. There, where according to local statistics, 13,000 German and foreign book firms are represented by agencies or agents, and where one in every fifty of the 600,000 inhabitants is said to be connected directly or indirectly with the book trade, the movement that is going on in Germany for the uplift of printing is exemplified by books in astonishing number, covering every subject and ranging through all manner of production from editions de luxe, limited to a few hundred copies, to books printed in large editions at prices held down to a few marks and in cases not exceeding a few pfennigs. I have expressed my opinion about the unrestrained output of new type-designs in Germany. Every renewed tour of study has confirmed that criticism; but every such tour also has increased my respect for what is being done for printing as a whole by the remarkable unity of effort among all the German arts and professions that touch it.

Nowhere have I found all the book interests—authors, artists, technical periodicals, publishers, printers, library authorities and producers of material—so united in intelligent understanding of what is to be accomplished. I am far from intimating that the arts have bowed in sanctified peace to one meekly accepted dogma. German technical discussion is robustly polemical and disputation is so vigorous that the superficial observer might imagine that the graphic arts were at war about almost every detail of technique. But there is an agreement upon fundamental principles; and this is so nearly universal that even the sharp, sometimes bitter, conflict between the ultra-conservative and ultra-modern groups retains points of contact and definite understanding.

This basic consistency gives a public power to the German book-producing professions which I have seen nowhere else. I have noted something like it in France, but not nearly in the same measure. We of the United States are far behind, and the same is true of our colleagues in Great Britain. Where we depend for our support, material and moral, on the comparatively small group of cultivated readers and bibliophiles, the German professional workers have succeeded in making the graphic arts interesting to the whole public. Their "common people" are proud of the national art of the book, and not merely as a matter of national pride. I would not imply that German masses have attained a higher critical faculty than the people of other countries; but through all levels of society except the lowest there is thorough respect for books as vital factors in civilized human existence. This respect for books has inspired an intelligent respect for the arts that produce the book. Therefore, the German publisher is encouraged by the definite knowledge of support. He can count on a public for the expensive book, and on a public for the good cheap book; and while the latter public does not demand rich materials nor the finer niceties, it does recognize an art that triumphs with crude materials.

In this development of art in the cheap book the private presses have done invaluable work. The great ones recognized from the

beginning that rich materials are only additional beauties, and can never serve as substitutes for the fundamental beauty which can be attained only by correct design and good technical execution. As a result, many of the fine limited editions have been popularized by regular publishers who have reproduced them for a larger public by modifications conforming to cheaper paper and to the mass-production necessary to make low price possible. Some of these feats are really brilliant demonstrations of what the art of the book can accomplish; and the successes have led to a most useful and inspiring accord among private and public presses.

English and German books, unlike as they are in detail, are alike, as already said, in being constructed on the same fundamental principle of book art—the principle that considers the book as a unity. Although this principle, largely owing to the brilliant productions of Pelletan, has been fully recognized in France also, the French book, in accord with the national tradition and genius, is still thought of, consciously or unconsciously, as a vehicle for illustration and designed decoration—an attitude natural to a nation with a long line of great etchers, wood-engravers, lithographers and other artists who have made the French illustrated book famous.

In today's French book the dominant feature is the woodcut; and the dominant style represents an almost literal return to the simple, easily printable wood-block of the earliest illustrated books. Artists and wood-engravers whose fame has been won by styles entirely different, are striving just now for the naive, primitive conception. Minimum of detail, dependence on a few masses to produce the picture, a line rough, unsweetened, an abandonment of many undeniable aesthetic values, produce results that quite frequently have undeniable power, even when disconcertingly crude.

The tendency is not limited to France, of course. It has won support, talented and non-talented, in the United States, and it is strong throughout Europe. French-speaking Switzerland, Italy, the Slavs, Czechs and Bohemians, have adopted it almost in toto, and the woodcut (or process plates imitating it) may be called a craze on

the Continent. The small nationalities, in particular, are using it as the vehicle for a characteristic art. But France, with its distinguished artists who have kept wood-engraving alive, is the leader.

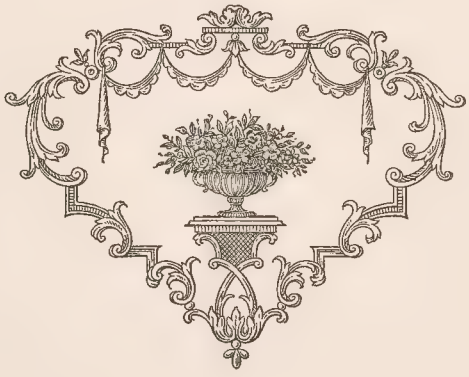
These rugged, simple wood-blocks lend themselves easily to color and color is another prominent feature of the modern French book, nor is it limited to expensive works. In a surprisingly large number of cases it is applied by hand, usually through the stencil method. There is enough of the work to support several studios in Paris which have taken it up as a trade, thus representing in a way a revival of the ancient trade of the lesser illuminators. A recent very expensive book shows the refinement of the method. Some of its full-page plates are printed entirely in color, and others are in color that is partly printed and partly applied by hand, achieving a beautiful result. Under French economic conditions, hand-coloring generally is cheaper than color-printing for low-price books when the edition is small. In expensive books, the hand-coloring, when done by competent artists, is esteemed by French book buyers.

In Germany the slashing use of black and white masses for building up a pictorial or decorative design is quite dominant in advertising art. Its influence in the art of the book is powerful, but neither in Germany nor England has this ultra-modern manner displaced the other accustomed forms of illustration. Book art in both countries draws on all forms, and the charm of the old-style drawing with graceful line and detail (whatever the medium may be) continues to demonstrate its vitality and enduring beauty side by side with the books illustrated in the newer style.

As may be inferred from my earlier reference to the new types that are incessantly produced in Germany, the German book is eminently typographical in conception, being constructed on the principle followed by us that, as type is the chief part of any book, it must necessarily be the dominating factor in the design. Hence even when a German book is decorated lavishly with specially designed ornament, the competent designer seeks to make drawings of typographical character. The type-founders have given such intelligent

attention to typographical ornament that while there is much good book illustration, the German book-designer tends to look to decoration as ranking with illustration for his effects. In looking over recent German books, I could see a decided leaning by illustrators to give their illustrations some character that would make them decorative of the book. Without pressing the thought too far, this would be appropriately in the line of traditional German art, for the ancient German artists and engravers who were inspired by Dürer and Wohlgemuth, knew how to make illustration both illustrative and decorative in an eminent degree.

The highest uniform level of typographic treatment, decoration and illustration is, I think, exemplified in the fine English book as produced by the private and semi-private presses. Their development of the book has been singularly steady in thought and execution. Abandoning the Morris cult of the medieval (which was chiefly his own personal passion), they have otherwise moved undisturbed in the direction initiated by the Kelmscott Press. Some of the examples produced in recent years have equalled, though not exceeded, the Kelmscott achievements. Illustrated or non-illustrated, ornamented or plain, the fine English book has a rich tranquillity that is characteristic.



A CHRONOLOGY OF PRINTING

A CHRONOLOGY
OF
PRINTING

PREPARED AS AN AID TO TYPOGRAPHIC
RESEARCH AND STUDY
BY
JULIUS W. MULLER

PREFACE

THIS chronology is the expansion of a private one made for convenience in work which demanded quick reference to extremely miscellaneous data ranging through all periods of the printed book. Its principle is that of a chronology of Italian painters and sculptors and of the Medici Family made by Edward E. Bartlett for his own use, and esteemed by the present compiler because it so well meets the requirements of an interest that is professional without being specialized. The effort in the "Chronology of Printing" has been similar—to avoid specialization, and to bring together data for the man whose interest is general. For specialized needs, the typographic student, the collector of rare editions, the book illustrator each would desire a chronology essentially different from that which might serve any other group. It is hoped that the one here presented will, within its own limits and in its own field, be broadly useful.

The desire has been to give a reasonably full picture of the centuries without making it so bulky as to defeat its chief purpose of convenience. Necessarily, the selection of data was largely a matter of personal judgment. Books have been omitted when they might well have been included, and vice versa.

The library of the British Museum contains about 9000 books printed before 1500, and this accumulation represents only a part of fifteenth century production. In its prospectus (1925) of the contemplated *Gesamtkatalog der Wiegendrucke*, the German commission for the complete catalogue of the incunabula says that 37,639 of 40,000 known different prints have been studied and listed, and that the catalogue, to consist of twelve volumes in folio, will require about twelve years for completion. Production in succeeding centuries naturally was still larger. To assume the prerogative of selecting a few hundred examples from such an enormous mass would be unpardonable if done for any purpose other than the one here stated.

Colleagues in England, France and Germany have been generous in reading proof and in contributing their knowledge in those cases where the records are doubtful or where authorities do not agree. The printing art has preserved other histories better than its own. Early books lack title-page, name of printer, place and date of printing. Censorships and other prohibitions often led timid printers to falsification of imprints. In addition, even the best printers spelled and misspelled their own names with fine freedom, and for good measure Latinized them in manner that testifies to love for punning rather than to loving regard for posterity. When we deal with books made before the era of title-pages, the mere task of stating an exact title is anything but simple. Aside from archaic language forms, there is confused phraseology

with capricious orthography and strange grammar. In the lesser books, defective types add to the obscurity. As a result there are many versions of the titles of early works. Special effort has been made in these cases to study the original pages or their replicas in the light of the various interpretations. Where literal renderings are given, the original imprint is followed, regardless of misspellings or other errors. No effort has been made to bring the divers and sometimes astonishing usages of the old printers into accordance with our own editorial style; nor has uniformity of style been permitted anywhere to control where ease of reference or of reading could be served by departing from it.

Acknowledgments for co-operation are due to

GEORGE W. JONES—LONDON

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THOMAS M. CLELAND—NEW YORK

RUTH S. GRANNISS—GROLIER CLUB

JULIAN STREET, PRINCETON

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Among works consulted are:

A CENSUS OF CAXTONS—DE RICCI

GEOFROY TORY—BERNARD

THE VENETIAN PRINTING PRESS—BROWN

GREEK AND LATIN CLASSICS—DIBDIN

EINE FRANKFURTER SCHRIFTPROBE VOM JAHR 1592—MORI

THE ART OF THE BOOK—HOLME

PLANTIN-MORETUS—HENSEL

PRINTING TYPES—UPDIKE

THE EARLY PARISIAN GREEK PRESS—GRESWELL

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JOHN BASKERVILLE—BENTON

DAS LOB DER DRUCKKUNST—STEMPEL

LIBRARY COMPANION—DIBDIN

TWO CENTURIES OF TYPE-FOUNDING—JONES

A GUIDE TO AN EXHIBITION OF THE ARTS OF THE BOOK—IVINS (METROPOLITAN MUSEUM OF ART)

DRUCKWERKE UND EINBLATTDRUCKE DES 15. BIS 20. JAHRHUNDERT—STADTBIBLIOTHEK FRANKFURT-AM-MAIN

LA LETTRE D'IMPRIMERIE—THIBAUDEAU

LES DÉCORATEURS DU LIVRE—SAUNIER

FOUR CENTURIES OF FINE PRINTING—MORISON

EARLY TYPOGRAPHY—SKEEN

ILLUSTRATED BOOKS OF THE PAST FOUR CENTURIES—WEITENKAMPF

NOTABLE PRINTERS OF ITALY DURING THE 15TH CENTURY—DE VINNE

THE LETTER OF COLUMBUS—NEW YORK PUBLIC LIBRARY

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GIAMBATTISTA BODONI—CLELAND

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DEPOSITIO CORNUTI TYPOGRAPHICI

BEITRÄGE ZUR INKUNABULAKUNDE

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DAS SCHRIFTGIESSERGEWERBE IN SÜDDEUTSCHLAND—MORI

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THE INVENTION OF PRINTING—DE VINNE

MECHANICK EXERCISES—MOXON

ARCHIV FÜR BUCHDRUCKERKUNST

AUTOBIOGRAPHY OF BENJAMIN FRANKLIN

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AN EXHIBITION OF AMERICAN PRINTING—AMERICAN INSTITUTE OF GRAPHIC ARTS

THE PRINTED BOOK BEFORE THE NINETEENTH CENTURY—SILVE

AN HISTORICAL SKETCH OF THE STEPHEN DAYE PRESS—UNIVERSITY PRESS

A NOBLE FRAGMENT—NEWTON

THE MANUAL OF LINOTYPE TYPOGRAPHY—ORCUTT AND BARTLETT

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LE SENTIMENT ARTISTIQUE DANS LA DÉCORATION DU LIVRE MODERNE—ROCHER

ÉDOUARD PELLETAN—PIERRE GUSMAN

FÜHRER DER DEUTSCHEN BUCHKUNST—BUCHGEWERBEVEREIN

THE NEW BOOK-ILLUSTRATION IN FRANCE—PICHON

DIE DEUTSCHEN BUCHDRUCKER DES XV JAHRHUNDERTS IM AUSLANDE—HAEBLER

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TYPENREPERTORIUM DER WIEGENDRUCKE—HAEBLER

LIST OF PUBLICATIONS AND EXHIBITION CATALOGUES—GROLIER CLUB

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DAS ALTE BUCH—SCHOTTENLOHER

DIE ENTSTEHUNG DER FRAKTURSCHRIFT—KAUTZSCH

TYPOGRAPHICAL GAZETTEER—COTTON

VERÖFFENTLICHUNGEN DER GUTENBERG-GESELLSCHAFT

DAS MODERNE BUCH—VOLKMANN

THE BINDING OF BOOKS—HORNE

MARKSTEINE—BAENSCH-DRUGULIN

EARLY ILLUSTRATED BOOKS—POLLARD

CHRONIK DER DEUTSCHEN SCHRIFTGIESSEREIEN—BAUER

BOOK-PLATES—HARDY

THE GREAT BOOK-COLLECTORS—ELTON

TASCHENBUCH FÜR BÜCHERFREUNDE—SCHRAMM

WHO WAS SCOTLAND'S FIRST PRINTER?—DICKSON

DIE KUNST UNSERER HEIMATH—WINDISCH

ON THE PSYCHOLOGY OF WRITING—KÜHL

DAS REGENSBURGER BUCHGEWERBE 15. UND 16. JAHRHUNDERT—SCHOTTENLOHER

AN INDEX TO THE EARLY PRINTED BOOKS IN THE BRITISH MUSEUM—PROCTOR

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CATALOGUE OF MANUSCRIPTS AND EARLY PRINTED BOOKS (MORGAN LIBRARY)—POLLARD

DIE BAMBERGISCHE PFISTER DRUCKE—ZEDLER

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PRINTING IN THE NINETEENTH CENTURY—DEVINNE

A DISSERTATION UPON ENGLISH TYPOGRAPHICAL FOUNDERS AND FOUNDERIES—MORES

HISTOIRE DU LIVRE ET DE L'IMPRIMERIE EN BELGIQUE—LIEBRECHT AND VINCENT

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DIE LITURGISCHEN DRUCKWERKE ERHARD RATDOLTS—SCHOTTENLOHER

CHRONOLOGIE DES ARTS GRAPHIQUES—BILLOUX

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LA IMPRENTA EN MEXICO—MEDINA

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CATALOGUE OF EARLY GERMAN BOOKS (MURRAY LIBRARY)—DAVIES

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DIE DONAT UND KALENDAR TYPEN—SCHWENCKE

A CHRONOLOGY OF PRINTING

GIVING THE PRINCIPAL DATES AND PERSONAGES
IN PRINTING HISTORY
PREPARED AS AN AID TO TYPOGRAPHIC
RESEARCH AND STUDY

A CHRONOLOGY OF PRINTING

XV CENTURY

INVENTION OF PRINTING—PERIOD OF THE INCUNABULA

1440-1446 *circa* Era ascribed to Lourens Janszoon Koster (Coster), Haarlem, Netherlands, as inventor of printing with movable types. No existing examples, except various conjectural specimens of roughly printed DONATUS fragments without name, place or date, which some claim belong really to a period 1471-1474. Aelius Donatus, a grammarian of about fourth century A.D., author of textbooks which were reproduced in manuscript, block-book and type form till well after fifteenth century.

1440 COLOGNE CHRONICLE, printed in Cologne, 1499, gives date of invention of printing with movable types as 1440, ascribes it to "Junker Johann Gutenberg," and says that in 1450 the first book was printed—the Bible in Latin.

1444-1447 A single paper sheet printed on both sides. Artless verses in a German as used by the common people, warning sinners of the Day of Judgment. Discovered in Mainz and given to the Gutenberg Museum where it was identified as a chapter of a book of prophecy current in the preceding century in various manuscript versions known as Sibylline Books. Approximate date fixed by elaborate comparisons with other existing early types. The type, a large Gothic, shows approach to the later types of the 1447 Calendar. Ascription to Johannes Gutenberg (Johannes Gensfleisch) conjectural, though supported by a great amount of deductive reasoning based on immensely detailed minute research.

1447 Fragment of Calendar in German. Large Gothic type printed on sheet more than 20 inches deep. Astronomical calculations show that it was for 1448, hence presumably printed in 1447. Discovered in 1901 by Dr. Zedler of the State Library in Wiesbaden, as part of binding of a fifteenth century manuscript. Ascribed by him, on basis

of complex and elaborate measurements and type comparisons, to Gutenberg.

1454 First dated printing known. Letter of Indulgence by Pope Nicholas V for contributors to Crete's war against the Turks. One of the earliest known prints in the German language. Initials written in with red ink. Text emphasized in places by being underlined in red. Two editions, one 30 line, the other 31 line, in different types, both possibly cut for Gutenberg by Peter Schöffer. One edition dated 1455.

1456 Gutenberg Bible. No date or printer's name. Only established date is in Cardinal Mazarin copy (Bibliothèque Nationale, Paris). Evidence indicates that printing required at least five years. 2 volumes, folio, 641 unnumbered leaves. Volume I, 324 leaves; Volume II, 317 leaves. Two columns, 42 lines each, to page. Some pages in early copies contain only 40 and 41 lines. Latin. Type, beautifully legible Gothic closely following best ecclesiastical book-hand in manuscript books. Headlines, accents and illuminated initials supplied by hand. Copies exist both on vellum and paper. In 1911 Mr. Huntington purchased the Hoe copy for $50,000 "the highest price ever paid for a book." This copy is vellum. The record for a paper copy is 9500 pounds paid by Dr. Rosenbach, the American book buyer, at the sale of the Earl of Carysfort's library, in London, July 2, 1923. The New York Public Library copy (first copy to come to this country) was purchased in 1847 by Henry Stevens in London for James Lenox for 500 pounds, "considered an outrageous price." Dibdin in 1823 says, "a fair copy may be worth 150 guineas but has recently been pushed 30 guineas beyond." A fine copy bought in that period by Duke of Sussex for 160 guineas. Another (owned by Sir M. M. Sykes) brought 189 pounds.

1456 Rubricator's inscription in Mazarin copy of Gutenberg Bible, as translated by Dibdin: "Illuminated, bound and perfected by Henry Cremer, Vicar of the Collegiate Church of St. Stephen of Mentz, in the year 1456, on the Feast of the Assumption of the glorious Virgin Mary." The Mainz record of this vicar is "Heinrich Albech, named Cremer."

1456 German translation of BULL promulgated by Pope Calixtus III, June 20, 1456. Ascribed to Gutenberg.

1456 Fragment of Calendar in Latin. Large Gothic type. Identified by astronomical calculations as being for 1457, hence presumably printed in 1456. Discovered as part of binding of old business records in

Mainz, and now preserved in Bibliothèque Nationale, Paris. Names best days for administering medicines and therefore is known as LAXIERKALENDAR. Variously credited, on basis of type comparisons, to Gutenberg, Schöffer, Pfister, and the unknown printer of the 36-line BIBLE OF BAMBERG. (See 1457-1458.)

1457 First book printed in colors. First printed book with printer's name, date and place. Johann Fust and Peter Schöffer, Mainz, print the great folio PSALTERIUM, one of the splendid liturgical books of all time. Once considered a more valuable collector's item than the Gutenberg BIBLE. Type, large Missal Gothic, masterfully used. Famous typographically for magnificent initial letter B printed in blue on red ornamental background 3½ inches square at head of first page, tracery of ornament in red running along entire left hand type margin. About 280 smaller initials scattered through text and printed red or blue. Extraordinary for perfect registry, which has caused much conjecture as to method of printing. Vellum copy in Hof-und-Landesbibliothek, Darmstadt, has the great B initial printed in red on blue ornament, thus differing from the examples in the Morgan Library and the British Museum, which have served as the basis for most reproductions and descriptions.

1457-1458 Unknown printer, Bamberg, Germany, prints 36-line BIBLE in Latin with large Gothic type closely resembling the 1448 and 1457 Calendar types which are also known as Donatus types because of fragments of Donatus leaves ascribed to this period. This Bible is not dated, but date is fixed by documentary evidence. A well-printed book.

1458 Fust and Schöffer, Mainz, print CANON MISSALE, a great liturgical folio in the manner of the PSALTERIUM, in two sizes of the large Gothic Missal types used in that work. Only example known is in Bodleian Library, Oxford, England. Twelve vellum leaves bound in white vellum. A great initial T printed red on blue ornamental ground in style of the B in the PSALTERIUM and equal to it in beauty. Many other large and small initials in red on blue, with text lines in red. Text in black fully equal to PSALTERIUM. Colored initials slightly inferior in places, not being so perfectly justified. No colophon, but date fixed by comparison with the 1457 PSALTERIUM and the 1459 reprint.

1459 Fust and Schöffer, Mainz, reprint PSALTERIUM. Not quite so perfect as first edition. Their success in printing colors had no influence on other printers who continued to leave such embellishment to the

illuminators. This is the second known book with printer's name, date and place.

1459 Completion of presswork on Durantus, RATIONALE DIVINORUM, printed by Fust and Schöffer, Mainz. "First printed book with types made by improved method—characters cut directly into bronze or steel and struck into hard matrices of copper or brass." (Gustav Mori.) Beautiful large initial Q printed red on blue with red and blue ornament along type margin.

1460 Gutenberg prints Johannes de Balbus, CATHOLICON with colophon: "this work: Catholicon in 1460 in Mainz . . . . not with reed, pencil or pen, but with patterns and forms of wondrous relation, proportion and uniformity . . . . " Colophon has no printer's name. Type, small, round Gothic, quite different from 42-line Bible type. Less formal. Far less distinguished. About 65 copies known of this book. Some of these have a line of the first page printed in red, but most of them were left to be illuminated by hand. One of the very valuable incunabula.

1460 Fust and Schöffer, Mainz, print CONSTITUTIONES, Pope Clement V (1305-1316). One of the famous incunabula. Folio.

1460 Johann Mentelin, first printer in Strassburg, prints 49-line Latin BIBLE. Date fixed by rubricator's note in copy in University Library, Freiburg. Volume I marked 1460, Volume II, 1461. Mentelin type is one of the fine Gothics whose round and simplified form tends toward Roman. Selected for study by William Morris.

1461 Albrecht Pfister, Bamberg, makes woodcut illustration a prominent feature of the printed book. Rough wood-blocks, intended to serve only as a foundation for hand illuminator's work. Printed illustration does not become general till ten years later. Not many examples. A book narrating a dispute with death is considered earliest existing book with printed woodcut illustrations.

1461 First dated book with woodcut illustration. Albrecht Pfister prints Ulrich Boner, EDELSTEIN, a book of fables in German by a Dominican monk of Berne. Type, large, powerful Gothic, handsome but not highly legible. Only two copies known. One in great library of Berlin contains 103 woodcuts, another in Wolfenbüttel has 101 and the verse, lacking in Berlin copy, in which date of publication is given as St. Valentine's Day, 1461.

1462 Fust and Schöffer, Mainz, print Latin BIBLE (48 lines to column), 2 volumes, folio. Called "pulcria biblia" by Schöffer, and generally

considered one of finest fifteenth century Bibles. First Bible bearing printed date. Red initials printed. Those intended to be blue left in outline for rubricator. Colophon printed in black and red with the famous two shields of the Fust and Schöffer printers' mark in white on red. After this period Fust and Schöffer ceased color-printing and left the work to illuminators. The Earl of Carysfort vellum copy sold in 1923 to Dr. Rosenbach, the American book buyer, for 4800 pounds.

1462 Fust and Schöffer, Mainz, print broadside by Diether von Isenburg, Archbishop of Mainz, against Count Adolf von Nassau, his rival for authority. The first polemic print.

1462 Warfare between rival Archbishops Diether II von Isenburg and Adolf II von Nassau, ends in capture of Mainz by Adolf, sack and pillage, withdrawal of ancient privileges and exile of many citizens. Its printers and scholars scatter through Europe, spreading the art suddenly and widely.

1463 *circa* The first title-page: Papal BULL printed by Fust and Schöffer, Mainz. See 1470 for early book title-page.

1464 *circa* Adolph Rusch, Strassburg, prints first book in Roman type, Durantus, RATIONALE DIVINORUM. Type rough, but design good. Plain forecast of the more elegant Italian Roman types to come. Because of ungainly capital R, this type is referred to as the "R Bizarre."

1465 *circa* An early Boccaccio. Fust and Schöffer, Mainz, print Leonardus Aretinus, TANCREDI FILAE SIGISMUNDAE AMOR IN GUISCARDUM. (Translation into Latin by Leonardo Bruni of Arezzo.) Printed with types of 1462 Bible. Fust and Schöffer printers' mark on last page.

1465 Only known date for fixing arrival of first printers in Italy, though it is considered almost certain they arrived earlier. Conrad Sweynheym (sometimes Sweynheim and Sweinheim) and Arnold Pannartz transport press or presses and equipment over Alps and establish themselves in Benedictine monastery at Subiaco, near Rome, under the prior (later Cardinal), Johannes de Turrecremata, or, by his Spanish name, Juan de Torquemada.

1465 The first book printed in Italy. The first dated book outside of Germany. Sweynheym and Pannartz, Subiaco, print Latin edition of works of LACTANTIUS. Folio. Type, a Gothic so simplified as to suggest the Roman forms that followed in a few years. Considered one of the

beautiful early types, and still a mystery to typographical students. Imprint gives place and date of printing (October 30, 1465) but not printers' names.

1465 Sweynheym and Pannartz, Subiaco, print Cicero, De oratore. No imprint of name, place or date. Some commentators hold that it preceded the Lactantius, because a copy contains the written date September 30, 1465.

1465-1467 A lost Subiaco print. An edition of Donatus, Octo partibus orationis. No example known, but a petition by Sweynheym and Pannartz to Pope Sixtus IV enumerates it as one of their works and states that 300 copies were struck off.

1466 Heinrich Eggestein, Strassburg, prints an advertising announcement of books for sale. Latin. Types of character transitional between Roman and Gothic, poor in design but very legible. This is often referred to as the first printed advertising circular. See 1471, 1480.

1467 Sweynheym and Pannartz, Subiaco, print St. Augustine, De Civitate Dei. Imprinted with date, June 12, 1467, but not with place of printing or with printers' names. (None of the three existing Subiaco prints bear the names of Sweynheym and Pannartz.) 542 leaves, 44 lines each.

1467 Sweynheym and Pannartz begin printing in Rome. First book: Cicero, Epistolae ad Familiares. Rough Roman. Printers' names imprinted in form of verses, which appear in imprints of most succeeding books.

1467 Ulrich Zell, first printer of Cologne, Germany, prints Johannes Nider, Consolatorium timorate consciencie. A tract for Confessional advice, and one of his earliest works.

1467 *circa* Ulrich Han, Rome, prints Cardinal Turrecremata, Meditationes, often cited as first book in Italy to have printed initials and floriated borders instead of leaving blanks to be filled in by artists. The practise did not become common till introduced by Ratdolt. See 1476. Type, large Gothic, opened up in calligraphic manner. Set across full width of page. Initials clumsy. Illustrated with woodcuts, and thus notable as early example of illustrated printed book.

1468 Günther Zainer, first printer in Augsburg, prints Meditationes de vita Christi. With date in imprint. He is presumed to have made his own types and supplied many other printers. Zainer was one of the first printers to follow Pfister in the use of woodcut illustrations.

1468 Following this period Zainer produces a long series of popular German "folk books" illustrated with rough woodcuts: SPIEGEL MENSCHLICHER BEHALTNIS, BELIAL, PLENARIUM, SCHACHZABELBUCH, etc. During ensuing period of approximately 20 years, Augsburg and Ulm developed a great business in illustrated printed books.

1468 "Second type" of Sweynheym and Pannartz in Rome. LACTANTIUS, folio. More Roman in character than the Subiaco LACTANTIUS, though still a Gothic form. A legend that Nicolas Jenson cast this face. Type not so elegant as the Subiaco letter.

1468 Gutenberg dies.

1468 Berthold Ruppel, an assistant to Gutenberg, and witness in his suit against Fust, establishes press in Basle, and prints till *circa* 1495.

1469 *circa* Sweynheym and Pannartz, Rome, print CAESAR, Editio Princeps, folio (second and third editions 1472). VERGILIUS, likewise Editio Princeps, folio, one of the rarest early works. LIVY, 3 volumes, folio. Between this date and 1473 this Roman press produces 36 books. Almost all their books printed in Rome bear their names as printers.

1469 Beginning of the great Venetian printing. First Venetian printers, Johannes of Speyer and his brother Wendelin, also called Windelin. Family name unknown. The name "Speyer" supposed to be derived from German city of Speyer. Imprints are Johannes and Joannes de Spira, Vindelinus and Vendelinus de Spira, and frequently the Italian form da Spire.

1469 Johannes and Wendelin of Speyer, Venice, print Cicero, EPISTOLAE AD FAMILIARES. Type, a clear, distinguished Roman with nothing of Gothic remaining except ruggedness of line. Superior to Sweynheym and Pannartz Subiaco type, both in design and mechanical execution. Only 300 copies struck off. Colophon says "Primus in Adriaci formis impressit," etc., and this statement that it was the first book printed in Venice is now generally accepted as correct. See 1471, DECOR PUELLARUM.

1470 Nicolas Jenson begins printing in Venice. A Frenchman, Master of the Mint, Tours, sent by Charles VII to Mainz to investigate printing. Apparently never returned to France, but went to Venice to print. Sometimes suggested that he was first associated with Sweynheym and Pannartz.

1470 Nicolas Jenson, Venice, prints Eusebius, De Praeparatione Evangelica, folio. Generally considered his most beautiful work, and cited by most authorities as his first book. First use of his Roman types. Jenson period, 1470-1480. More than 150 editions known to be by him or attributed to him.

1470 Jodocus Pflanzmann, Augsburg, prints the first illustrated German Bible. Rough woodcuts, several of which are used repeatedly throughout the book to represent different characters and scenes—a naive method observable in many early illustrated books.

1470 Nicolas Jenson, Venice, prints Justinus, Epitom; Cicero, Epistolae ad Atticum; Cicero, Rhetorica & De Inventione, all in his Roman type.

1470 Speyer press, Venice, prints Livy (Livii), Historiarum Romanorum Decades, 3 volumes; Pliny, De Naturali Historia; St. Augustine, De Civitate Dei. (The latter book completed by Wendelin after Johannes' death in 1470.) All in Roman type. Only 300 copies of the Pliny struck off, 600 copies of St. Augustine in two editions. See 1473 for use of Gothic by Wendelin.

1470 Christopher Valdarfer, Regensburg, sets up press in Venice and prints Cicero, De oratore. Also prints a Decameron. Removes to Milan, 1473, and prints there till 1488.

1470 Arnold ther Hoernen, Cologne, prints one of Rolewinck's sermons. Oldest known book with a page approximating the title-page. One of the first books with page numbers printed in. Probably first printer to use headlines.

1470 First printing in France. Michael Freyburger (also spelled "Freiburger"), Ulrich Gering and Martin Crantz (sometimes Kranz) of Germany set up press in Paris. Roman type chiefly.

1470 Freyburger, Gering and Crantz, Paris, print Gasparini, Epistolae, and Gasparini, Orthographia. Roman type, modelled on Sweynheym and Pannartz Subiaco type but not so good. See 1473, 1476.

1471 William Caxton at Bruges, Netherlands, finishes English translation of Raoul Le Fevre's "Recueil des histoires de Troie." Demand for copies of his manuscript leads him to study printing.

1471 Günther Zainer, Augsburg, prints announcement of books printed by "Gunthero genant zainer von Reutlingen." German. Type, a massive, legible Gothic. Advertises three books: Siben teutsche psalmen, a

German devotional book; DIE HISTORI VON APPOLONIUS, a story of the King of Tyre; GRISELDIS, a translation from Petrarch. See 1466, 1480.

1471 Nicolas Jenson, Venice, prints CAESAR and NEPOS. Fine example of latter, with illumination, in Pierpont Morgan Library.

1471 Nicolas Jenson, Venice, prints DECOR PUELLARUM, a book instructing young girls how best to rule their lives. Imprint MCCCCLXI. Generally conceded as being misprint for MCCCCLXXI. Several Jenson books, like other early books, show errors in dating.

1471 Nicolas Jenson, Venice, prints series of devotional books like DECOR PUELLARUM—PALMA VIRTUTUM; GLORIA MULIERUM; PAROLE DEVOTE.

1471 First book printed in Speyer, Germany: POSTILLA SCOLASTICA SUPER APOCALYPSIM. Bears name of place and date, but no printer's name. Type, a curious calligraphic Gothic and a small Roman. Eight books produced by this unknown printer.

1472 The second unknown printer of Speyer. Produces GESTA CHRISTI and nine other books, all in a transitional Gothic type.

1472 Johann Koelhoff, Cologne, prints Nider, EXPOSITIO DECALOGI. Believed to be first book with printed signatures.

1472 "John of Verona" prints Valturius, DE RE MILITARI. Eighty-two fine woodcuts of military operations and engines. An early and famous Italian illustrated book.

1472 Günther Zainer, Augsburg, Germany, prints a "Life of Saints," HEILIGENLEBEN, with elaborately floriated woodcut initials. German text, Gothic type. Woodcut illustration of a martyrdom used for fourteen different Saints.

1472 *circa* William Caxton said to have been associated with a Cologne printer to learn the art.

1473 First illustrated book positively known from Ulm, Germany. Johann Zainer prints Boccaccio, DE CLARIS MULIERIBUS. Both Latin and German editions. Type, Gothic, small and of poor design. Illustrated with woodcuts, rugged but not crude, and showing good drawing. Plainly intended for hand-coloring after printing. Good woodcut borders on first page, both illustrative and decorative.

1473 Wendelin of Speyer, Venice, prints Robertus Carracciolus, QADRAGESIMALE in Gothic. Is believed to have been first printer in Venice using Gothic.

1473 Albert von Stendal, Padua, prints Petrarch, PSALMI POENITENTIALES. One of the smallest formats among the incunabula.

1473 First Gothic type used in France. Freyburger, Gering and Crantz, Paris, print MANIPULUS CURATORUM.

1473 Günther Zainer, Augsburg, prints Columna, DE REGIMINE PRINCIPUM. Printed headlines, chapter headings, paragraph marks, large and small initials, all complete without calling for aid from the rubricator. Bears date but not his name.

1473 Guillaume Le Roy, Lyons, prints Lothaire, COMPENDIUM BREVE, the first book printed in Lyons. Rough Gothic type of heavy character. Later uses a round Gothic: 1477, MIROIR DE VIE HUMAINE.

1473-1498 Established dates of printing in Netherlands (modern Holland and Belgium). 1473, Alost. 1474, Louvain, Johann von Paderborn. 1475 *circa*, Bruges, Colard Mansion. 1475, Brussels. 1477, Deventer, Richard Paffraet and Jacobus van Breda. 1477, Delft and Gouda. 1478, Zeeland. 1479, Nijmegen and Zwolle. 1480, Hasselt and Audenarde. 1481, Antwerp, Gerard Leeu. 1483, Ghent. 1484, Hertogenbosch. 1485, Schoonhoven. 1488, Leyden, Kuilenburg and Haarlem. 1498, Schiedam.

1474 *circa* First printing in Spain. Lambert Palmart, Valencia, prints Fenollar, OBRES E TROBES. Undated. Roman type. Palmart's first dated book, Johannes, COMPREHENSORIUM, 1475. (Though Spanish printing began with Roman types, they were almost immediately displaced by the general Spanish preference for Gothic.)

1474 *circa* A printer in Nuremberg, Germany, prints KALENDARIUM by Johannes Müller, the great astronomer of his time. In German. Type, a unique, handsome Gothic so simplified as to suggest Roman. The Müller calendars were printed in many places and languages, and are generally referred to in bibliography as the Regiomontanus calendars. Müller, born in Königsberg, signed himself in German as Johann von Königsberg, Latinized into Monteregio and then Regiomontanus. See 1476 for famous Ratdolt edition.

1474 Johannes von Königsberg issues in Nuremberg a large sheet, Gothic type, announcing in Latin the works on astronomy, geography, mathematics and music that he intends to print: HEC OPERA SIENT IN OPPIDO NUREMBERGA GERMANIE DUCTU IOANNIS DE MONTEREGIO. Only a few of

the scheduled books appeared. He was called to Rome in 1475 and died there.

1474 Venetian taste having turned to Gothic form as well as Roman, Nicolas Jenson prints his first Gothic book, Gratianus, CODEX. Text set double column as against his usual practise with Roman.

1475 Lukas Brandis, Lübeck, prints RUDIMENTUM NOVICIORUM. First dated print in that city. Illustrated with woodcuts, among them chart of the world and chart of Palestine, which rank among oldest printed charts. A fine work, though one cut serves as portrait for all the Greek sages, and another does duty for a number of cities. Pollard calls this "a splendid and notable book."

1475 Nicolas Jenson prints Saint Augustine, DE CIVITATE DEI, Gothic type. Some authorities name this as his first book in Gothic, but CODEX appears to be established as preceding it.

1475 Nicolas Jenson, Venice, produces VERGILIUS. Roman type.

1475-1478 First books by William Caxton. Printed in Bruges, Netherlands, presumably in association with Colard Mansion. Type, rough Flemish Blackletter. All folios. THE RECUYELL OF THE HYSTORYES OF TROYE, translated by Caxton from the French. THE GAME AND PLAYE OF THE CHESSE, translated by Caxton from the French. LE RECUEIL DES HISTOIRES DE TROYES, in the original French. LES FAIS DE JASON, French. MEDITACIONS. All undated, but "hystoryes of Troye" held to precede the rest, thus being the first Caxton and also the first book in English. (Colard Mansion probably printed or completed the French history of Troy and succeeding books.)

1476 Nicolas Jenson prints PLINY. Roman type.

1476 Erhard Ratdolt of Augsburg begins printing in Venice. Introduces printed ornamental borders and initials that eliminate necessity for hand-illumination. Till 1478 had as partners Peter Löslein and Bernard Pictor, Latinized form for Bernhard Maler of Augsburg. Ratdolt used both Roman and Gothic types. In the succeeding year appeared the first of the splendid Ratdolt initials, the "literae florentes" which still remain among the best achievements in book ornamentation.

1476 Ratdolt, Löslein and Maler, Venice, print CALENDARIO by "Regiomontanus." First decorated title-page. First title-page giving name of author, title, place, printer and date. Floriated border around title-page. Roman type. Small quarto, 30 leaves. See 1474 for German

edition. Regiomontanus, Monteregio and Monte Regio are forms of the name used by early printers.

1476 First Bible printed in France. Freyburger, Gering and Crantz, Paris. Gothic with Roman capitals. See 1470, 1473.

1476-1477 First printer in England. Late in 1476 or early 1477 William Caxton sets up press in Almonry at Westminster. See 1491 for his death and succession by Wynkyn De Worde of Alsace, his assistant.

1476 Johann Bämler, Augsburg, prints CRONICA VON ALLEN KAISERN UND KÜNIGEN. Handsome woodcut illustrations.

1476 Following this period, Bämler plays important part in production of popular German books illustrated with wood-blocks, as initiated by Pfister and Zainer. Issues among others: HISTORI VON DEM GROSSEN ALEXANDER, HISTORIE VON DER KREUZFAHRT, BUCH DER NATUR, etc. Uses introductory pictures, precursors of the pictorial title-pages which later became splendid ornaments of the book.

1477 Heinrich Knoblochtzer, Strassburg, prints the first illustrated books in that city. Many ornamented borders in woodcut but usually of coarse design.

1477 Johann Mentelin, Strassburg, prints Wolfram von Eschenbach, PARSIFAL. First printed edition of this famous legend.

1477 Ratdolt, Löslein and Pictor print CORIOLANUS CEPIO. Roman type. Floriated initials. Floriated border with two shields crossed. One of the beautiful early books.

1477 First book printed in England. William Caxton, Westminster, prints THE DICTES OR SAYENGIS OF THE PHILOSOPHRES, folio. Three editions. Flemish Blackletter differing from the Bruges types. The Carysfort copy bought in 1923 at Sotheby sale, London, by Quaritch for 2150 pounds.

1477 Günther Zainer, Augsburg, prints a Bible with large woodcut initials into each of which is introduced a little picture. At end of this edition is the fine printers' device which is also used by his relative Johann Zainer of Ulm. (First edition of this Bible in 1473 without the device.)

1477 *circa* First book in French printed in Paris. Pasquier Bonhomme prints CRONIQUES DE FRANCE. First use of Lettre Bâtarde. Gothic in character, French in spirit. A form of type still used.

1477-1484 William Caxton, Westminster, prints: BOOK OF CURTESYE, quarto, 1477; DIONYSIUS CATO, quarto, 1477; Chaucer, ANELIDA AND ARCITE,

quarto, 1477; Chaucer, The Temple of Bras (The Parlement of Foules), 1477; Boethius, De Consolacione Philosophie, folio, 1478; Aesop, The Book of the Subtyl Hystoryes and Fables of Esope, folio (translated from the French by Caxton), 1484; The Game and Playe of the Chesse (second edition), 1483. More than thirty books printed between 1477 and 1480 alone. Almost a hundred books ascribed to him altogether. Owing to lack of imprints, early Caxton printing dates are only approximate. About a third of Caxton books have date of imprint clearly stated. Type: Flemish "Bâtarde" designs of Gothic, uncouth and rough. See 1518 for first use of Roman type in England.

1477 Niccolo di Lorenzo, Florence, prints El Monte Sancto di Dio. One of the first books, if not the first, to be illustrated with copper-plate engravings. Full page pictures. Venetian and Roman printers followed with similar isolated attempts, but copper-plate illustration did not come into general use till end of the sixteenth century when the typographically conceived book declined.

1478 Günther Zainer, Augsburg, dies, having printed about 100 works, most of them illustrated with woodcuts and ornamented with initials large and small, some further ornamented with woodcut borders.

1478 Martin Husz (Huss), Lyons, produces first illustrated book in France: Le Mirouer de la Rédemption. Gothic type. Types and woodcuts from Basle.

1479 Giovanni Alvisio, Verona, Italy, prints Italian translation of Aesop, notable for good woodcut illustrations. Borders bear small repeated designs strongly suggestive of the typographic flowers adopted in later periods.

1479 Heinrich Quentell, Cologne, issues his first dated print. Between this date and 1500 prints more than 400 works, among them the famous Quentell Bibles in German and Dutch with excellent, large woodcuts and elaborately decorative margins.

1479 Johann Neumeister, Mainz, prints Turrecremata, Meditationes. Illustrated with 34 drawings engraved in metal, with borders, ornaments black on white in the Florentine manner. Fine pointed Gothic liturgical type making a handsome page with the cuts which are placed as large headpieces.

1479 Nicolas Jenson, Venice, prints Marchesini, Mamotrectus, octavo. One of his last books. Gothic type. Not so good as his De Civitate Dei (see 1475), which is esteemed as beautiful Gothic printing.

1479 Jean Grolier born. Destined to exert great influence as patron of fine book art.

1480 ROMAN DE LA ROSE, attributed to Guillaume Le Roy, Lyons. Type, graceful French modification of Gothic. Illustrated with coarse woodcuts.

1480 Nicolas Jenson dies. Bequeaths his punches to Peter Ugelheimer (Ugelleymer), a Venetian patrician born in Frankfort, who had been interested in Jenson's printing business. (Jenson had formed partnership with John of Cologne, and books imprinted "John of Cologne and Nicolas Jenson" continued to issue till end of 1481.)

1480 Anton Koberger, Nuremberg, Germany, prints advertising circular, announcing in Latin a book by the Archbishop of Florence. Single sheet, Gothic type more rounded than first Germanic Gothics.

1480 Erhard Ratdolt, Venice, printing alone, produces CHRONICA, SEU FASCICULUS TEMPORUM, a popular chronicle first printed in Cologne about 1474, and appearing in many editions thereafter, German and Latin, issuing from various cities. Contains long passage on printing, ascribing it to 1457. Crude woodcut illustrations of cities, among them the second known print of Venice. Fine woodcut initials, floriated, white on black ground. Floriated borders. Gothic type. Another beautifully ornamented edition in Dutch, printed 1480, by Veldenher in Utrecht.

1480 *circa* Geofroy Tory born. Destined to elevate French book art as author, illustrator, decorator, type-designer and printer. Birthplace, Bruges. Hence signature, "Geofroy Tory de Bourges." Occasionally Latinized by him to "Godofredus Torinus."

1480 *circa* Andrea de Torresani, Venice, having previously bought a Gothic font of Jenson types, buys matrices of Roman from his heirs.

1481 Johann Sensenschmidt, Bamberg, prints MISSALE BENEDICTUM. Fine Missal types, unusual capitals in many sizes. One of the distinguished liturgical printers.

1482 Georg Reyser, Wurzburg, prints MISSALE MOGUNTINUM. Copper-plate first page showing arms of Mainz Cathedral and of the Archbishop.

1482 Erhard Ratdolt, Venice, prints Bosco, SPHAERICUM OPUSCULUM. Astronomical drawings in woodcuts printed black and white. Second edition (1485) shows six woodcuts printed in two colors each and one in four colors: black, red, orange, olive. The beginning of much similar printing by him, using mostly black, red, yellow and brown, but occasionally blue.

1482 Erhard Ratdolt, Venice, prints EUCLID. Pages with beautifully designed borders. Initials in his best grand manner. Geometrical symbols in white space adjoining text and placed to contribute ornamental character to pages. Folio. Prized as a masterpiece illustrative of what can be done with a textbook. First printed book with mathematical figures. Border and initials designed by Bernhard Maler. In a few copies, a dedication formed a full page printed in gold, and some red and blue was used in text and borders.

1482 Johann Blaubirer, Augsburg, prints ZEICHEN DER FALSCHEN GULDEN. Broadside illustrated with cuts of coins. One of the first printed "counterfeit coin detectors."

1482 Leonhard Holl, Ulm, prints Ptolemy, COSMOGRAPHIA. Contains one of the earliest woodcut maps. Fine initial letters. Handsome woodcut illustrations, with decided decorative instinct. Type, large, clear Gothic of elegance in design but imperfectly cut.

1482 Erhard Ratdolt, Venice, printing alone, produces CHRONICON (by Eusebius). Quarto. Gothic and Roman type. Printed in red and black. Floral woodcut initials on black ground. Fine example of Ratdolt treatment of large and small ornament. One of the books studied by William Morris.

1483 Erhard Ratdolt, Venice, prints DAS BUCH DER ZEHN GEBOTE. The Ten Commandments, in German. Type, a handsome small Gothic of fine legibility. Very large initial letters white with white floriation on black ground. Interesting treatment of headings and sub-headings.

1483 Peter Löslein, Venice, printing alone, produces Isidori, ETYMOLOGIAE HISPALIENSIS. Gothic type, much like Ratdolt's. Both Ratdolt and Löslein turned to Gothic type after dissolving their partnership.

1483 Anton Koberger, Nuremberg, prints BIBLE in German Gothic type tending to style later known as Schwabacher.

1483 Date of ARISTOTLE printed by Andrea de Torresani de Asola, an illuminated copy of which in Pierpont Morgan Library is accounted one of the world's magnificent examples of book decoration by hand.

1484 Peter Schöffer, Mainz, prints HERBARIUS, a treatise in German on medicinal trees and herbs, illustrated with woodcuts of about 150 plants, mostly in outline. Gothic type entirely different from the ceremonious ecclesiastical Missal and Bible types. Free calligraphic ease of forms clearly tending to the later Schwabacher.

1485 Peter Schöffer prints GART DER GESUNDHEYT, a work similar to the HERBARIUS, with more than 300 woodcuts of medicinal plants and a fine frontispiece showing a council of botanists.

1485 Peter Schöffer prints HORTUS SANITATIS, an enlarged edition of GART DER GESUNDHEYT, with additional cuts and a full-page frontispiece for each part. Another edition of HORTUS SANITATIS printed by Meydenbach of Mainz in 1491, and one with very fine woodcuts by Johann Prüss, Strassburg, 1495.

1486 The "Dinckmutmeister," Ulm, produces cuts for a famous illustrated book, Thomas Lirar, CHRONIK VON SCHWABEN. Representative of works issuing from that city whose craftsmen in this period became active in production of books with woodcuts. The 22 drawings in the CHRONIK show a great advance. Wood-blocks carved with considerable refinement. Use of shading marks them as transitional forms between preceding crude cuts that needed to be improved by the colorist, and later illustrations which were rich art in themselves. Artist's name lost. Known only as "Dinckmutmeister," because the books were printed by Conrad Dinckmuth.

1486 "Schoolmaster of St. Albans" (name unknown) prints the famous work of Dame Juliana Berners generally mentioned as the Book of St. Albans: THE BOKYS OF HAUKING AND HUNTYNG AND ALSO OF COOTARMURIS. Treatise on coat armor illustrated with rude woodcuts most of which are printed in color. Initials and paragraph marks printed in red and in blue. Printer's mark white on red. Earliest known color printing in England. Rough typography in types probably dating from Caxton's early period. Very few perfect copies known. Imperfect copies have sold for as high as $12,000. The finest perfect copy known was valued in 1925 by its American owner at $35,000. Wynkyn De Worde reprinted the work in 1496 and added the TREATISE OF FYSHINGE.

1486 PEREGRINATIONES IN TERRAM SANCTAM printed in Mainz. "A book marking arrival of conscious art in printed illustration." Describes journeys in the Holy Land by Bernhard von Breydenbach, illustrated by Erhard Reuwich (also spelled Reuwick). Pollard says it "stands on a little pinnacle by itself." Copies on vellum as well as paper, "as its magnificence deserves." Types apparently Peter Schöffer's. One of its features is a magnificent title-page, the design consisting of various coats of arms tied together with floriation amid whose stems are child

figures. In 1686 a copy auctioned off in England for four shillings. More than 12 early editions known, in Latin, German, French, Spanish and Dutch. Fine example in Morgan Library is catalogued as PEREGRATIONES IN MONTEM SYON.

1486 First known specimen sheet of types. Erhard Ratdolt in Augsburg publishes broadside showing Gothic, Roman and Greek. Assumed to have been printed in Venice before departure from that city. Gothic, 10 sizes, Roman, 3 sizes. One of the good type specimens of the world. See 1592.

1487-1495 *circa* Period of Plato de Benedictis (Francesco di Benedetti). Printed in Bologna, Italy, with a pure Roman type so happily designed that it preserves for modern use the richness of early Italian art. Only 33 works enumerated as his production.

1487 Printing introduced in Portugal, marking completion of its spread through Europe. A printer in Faro, known only as the "Printer for Don Samuel Gaeon" prints folio PENTATEUCHUS in Hebrew. From 1489-1492 Rabbi Eliezer prints in Lisbon, producing about six theological works in Latin.

1487 Between this date and 1522 Erhard Ratdolt, printing in Augsburg at invitation of ecclesiastical authorities, prints nearly 50 magnificent liturgical works for various Bishoprics. Initials, ornament and woodcut illustrations printed in gold, red, blue, green, olive and brown. First production, OBSEQUIALE AUGUSTENSE. Full page woodcut of Bishop Friedrich printed in black, red, yellow and olive. Introductory heading in red. One of his fine initials, Q, in white on black ground with white ornament. BREVIARY for Regensburg in same year has similar treatment. Drawing and wood-engraving for illustrations of high quality, showing influence of Augsburg craftsmen.

1487 Johann Neumeister of Mainz, invited to Lyons by Cardinal Amboise, prints there MISSALE SECUNDUM USUM LUGDUNI. One of the fine liturgical works of incunabula period, with stately pointed Gothic types. Liturgical printing continued to produce splendid books till Luther's time.

1487 Paris craftsmen turn their art to production of the famous books of worship known generally as Books of the Hours of the Blessed Virgin. A long period of increasingly ornate decoration. The books become a favorite luxury. Colors laid on both by printing and by hand. Illustrations and ornament by famous artists. Often printed on vellum.

Sumptuous bindings frequently encrusted with gems and gold. Estimated that about 600 editions were produced altogether.

1488 Antoine Verard, Paris, produces GRANDES HEURES with many woodcuts, after having produced his first small and plain Book of Hours in 1486. Issues about 25 of these devotional books up to 1513.

1488 Philippe Pigouchet and Simon Vostre produce HEURES À L'USAGE DE ROME. Not important as typography, but enriched by competent use of blocks of ornament with borders containing many handsome miniature designs. Vostre produces about 90 Books of Hours up to 1520. Pigouchet productions generally accounted the most important of all, with isolated exceptions.

1488 Johann Prüss, Strassburg, prints FLORES MUSICE ARTIS, with musical notes cut in metal.

1488 Andrea de Torresani (see 1480) prints in Venice, Hieronymus, EPISTOLAE, folio. Type, Jenson's Roman. A fine book, often referred to as linking periods of Jenson and Aldus, though Aldus did not use Jenson types.

1488 Jean Du Pré, Paris, prints Book of Hours with 5-page explanations of vignettes in the borders. Nineteen engravings on wood-block in some editions, and believed to have been on copper in others. In 1490, prints an edition in blue, red and green.

1488 Michael Wenssler, Basle, prints MISSALE, large and small Missal types of fine design, good borders. One of the leading liturgical printers.

1489 Luc Antonio Giunta (Latinized to Lucas Antonius Junta) is entered as printer in Venetian registry. Establishes press which produces many fine works, and later is praised as "second only to Aldus," who accuses the Giunta of pirating his types. A brother, Filippo, is a leader of printing in Florence. The great Venetian period of the illustrated book begins.

1491 William Caxton dies. Wynkyn De Worde succeeds.

1491 Anton Koberger, Nuremberg, prints DER SCHATZBEHALTER. Religious book, richly illustrated with woodcuts depicting Bible stories. Attributed to Michael Wohlgemuth, teacher of Albrecht Dürer. This, as well as the 1493 Chronicle, though representing high art in illustration, still were intended to be hand illuminated—a traditional habit that continued till Dürer and Holbein triumphed over it.

1491 First Bible in octavo. John Froben of Hammelburg (Latinized to Frobenius), in Basle (then a German city), prints BIBLIA LATINA. Small octavo. Froben's first dated book and probably his first production. One of the celebrated printers, eminent both for printing and scholarship. The first to use for Bible type the smallest body then known, approximately equal to nonpareil. Erasmus and Hans Holbein worked in close association with him.

1493 Jacob van Breda (Latinized Jacobus de Breda), Deventer (in diocese of Utrecht, Netherlands), prints EPISTELEN ENDE EVANGELIEN. Epistles in Dutch. Finely designed pages. Type, handsome, confidently modelled Gothic. Superior to Lettre de Forme used by Colard Mansion in Brussels, 1484. Similar to Haarlem letter of Bellaert, 1485. Same letter used by "Henrick die lettersnider" (Henry the letter-cutter) 1496 in Antwerp. Called by Enschedé "St. Augustin Flamand."

1493 Michael Furtner, Basle, prints DER RITTER VOM TURN. A medieval novel. Illustrated with 45 woodcuts of great vigor and quality, formerly ascribed to Dürer, but now held to indicate that in this period another skillful, unknown wood-engraver was active.

1493 Joannes (Giovanni) and Gregorius (Gregorio) de Gregoriis, Venice, print Ketham, FASCICULUS MEDICINAE. Illustrated with good woodcuts showing surgical operations and anatomical objects. Full folio page cuts show a dissection, a council of physicians, etc. (Original edition, 1491, contained only illustrations of surgical instruments.)

1493 Wynkyn De Worde prints his first illustrated book, THE GOLDEN LEGEND, using rude woodcuts owned by Caxton. Gothic type, rather rough.

1493 *circa* Richard Pynson prints Chaucer, CANTERBURY TALES. Illustrated with rough woodcuts at head of each page, the same cut being used with alterations for various characters.

1493 Anton Koberger, Nuremberg, prints Schedel, LIBER CHRONICARUM (the famous Nuremberg World Chronicle), with almost 2000 woodcuts from illustrations by Dürer's teacher Michael Wohlgemuth, the latter's stepson Wilhelm Pleydenwurff and others. A magnificent frontispiece. In German. Type, Gothic of character noticeably differing from the Gothics used for ecclesiastical works in Latin. The Chronicle was reprinted in many languages.

1493 Anton Koberger, Nuremberg, prints announcement of the LIBER CHRONICARUM. Handsome, legible Gothic on large single sheet. Latin text, partly prose, partly verse. Altogether more than 30 such book announcements were issued before 1500 by printers in Germany and Italy.

1493 Letter of Christopher Columbus to Gabriel Sanchez, royal treasurer of Spain, announcing discovery of America (Indies as he believed), printed in Europe. In original Spanish: Barcelona, type of Pedro Posa. In Latin translation: Rome, Stephen Plannck, 2 editions; Rome, Silber; Antwerp, Thierry Martens; Paris, Guyot Marchant, 3 editions; Basle, type of Jacob Wolf of Pforzheim; Basle, Johann Bergmann de Olpe (Bergmann von Olpe). Spanish, 1497, Valladolid, type of Pedro Giraldi and Miguel de Planes. German, 1497, Strassburg, Bartholomaeus Kistler. Of the 9 Latin editions, New York Public Library possesses 6. It possesses the only known copy of Posa Spanish edition.

1494 Aldus Manutius (born 1449 or 1450 in Bassano, Italy), begins printing in Venice. Musaeus, DE HERONE ET LEANDRO, GALEOMYOMACHIO, both in Greek.

1494 Johann Bergmann von Olpe, Basle, prints Brant, DAS NARRENSCHIFF, richly illustrated with woodcuts by the unknown artist of the RITTER VOM TURN, 1493. This "Ship of Fools" book became one of the most widely read works of the world and still is a classic in all languages.

1494 Joannes (Giovanni) and Gregorius (Gregorio) de Gregoriis, Venice, print Herodotus, HERODOTI HISTORICI INCIPIT. In Latin. A splendid opening page bearing title and text in Roman under woodcut illustration of good design. The whole page framed by wide border with illustrative designs and figures, held together by running floriated forms, white on black.

1494 Richard Pynson prints Lydgate, FALLE OF PRINCIS. Illustrated with what Pollard calls "some of the best woodcuts published in England up to that time."

1495 Denis Meslier, Paris, prints Villon, GRAND TESTAMENT. A feature is its opening initial letter, an extraordinarily fantastic design occupying great space and designed by printer to obviate necessity for hand illumination. Type, handsome Gothic of clearness and simplicity characteristic of Roman.

1495 Richard Pynson, England, prints USUM SACRUM in English. A fine Gothic type effectively used within pictorial border which is ornamental though drawing and wood-engraving are rough.

1495 In Florence, Italy, is printed EPISTOLE ET EVANGELI which is considered good example of the illustrated book as produced in that city in this period. Florentine book decoration is characterized particularly by fine borders with white ornament on very black ground.

1495 First music printed from type. Wynkyn De Worde, Westminster, Higden's POLYCHRONICON. A copy sold in 1760 for 14 shillings; in 1815 for 150 pounds; 1865 for 477 pounds.

1496 A book of DEN GROTEN PHILOZOPHE ENDE POETE JACOP VAN MEERLANT (the great philosopher and poet Jacob, or Jacques, van Meerlant), printed in Antwerp by "Henrick die lettersnider," who is believed to be the cutter of the type used by Van Breda.

1496 The press of the monastery of Hem, Schoonhoven, Netherlands, prints Dutch Book of Hours in the type of Deventer, 1493 and Antwerp, 1496.

1496 Govaert Bac, Antwerp, prints EPISTELE EN DYE EVANGALIE. Dutch, in the St. Augustin Flamand type.

1497 Hugo Janssoen van Woerden, Leyden, prints DIE GHETIDEN VAN ONSER LIEUER VROUWEN (book of hours in Dutch) in the St. Augustin Flamand type.

1497 Rolant van den Dorp, Antwerp, prints CHRONIQUE DE BRABANT. Flemish, in St. Augustin Flamand type. Finely composed and printed. Lines broken for paragraphs, which are further indicated by ornamental paragraph marks of distinguished character.

1497 Bartolomio de Zani da Portesia prints a PETRARCH, illustrated with engravings which show great advance over woodcuts of Ratdolt period. (Ratdolt's printed ornament superb, but illustrations were inferior.)

1497 Henri Estienne founds the great French press, illustrious with names of Simon de Colines, Geofroy Tory, Claude Garamond and the Estienne dynasty—Henri's sons, Francis, Charles and Robert, and Robert's son, Henri Estienne II, most famous of family.

1497 Thielman Kerver, Paris, begins production of his famous "Horae"—BOOKS OF THE HOURS OF THE BLESSED VIRGIN. Pigouchet's most effective rival.

1498 Anton Koberger, Nuremberg, prints APOCALIPSIS CUM FIGURIS, Albrecht Dürer's series of 15 woodcuts. The first edition with Latin text. The victory of the woodcut printed in black and white over the hand illuminated printed book.

1498 Erhard Ratdolt, Augsburg, prints one of his finest liturgical works, MISSALE for Passau. Text, folio pages of massive, close-fitting and beautifully legible Gothic, printed very black with one small initial in red to the page. Brilliant handling of psalms; musical scores and text printed in alternating lines. Musical notes black on red, text black with large initials in black and red. A fine full-page woodcut showing the city's three Saints printed in black, red, yellow, brown and olive. Drawing ascribed to Hans Burgkmair. Another MISSALE for the same city in 1505 with still finer designs and woodcuts, including a splendid great initial T printed in red on elaborately ornamented black and white ground, all ascribed to Burgkmair.

1498 Henrick Eckert van Homberch, Antwerp, prints VADER BOECK (The book of God the Father). In Dutch. Type, rich Gothic of St. Augustin Flamand character. Set in double column, divided into paragraphs. Handsome pages vigorously treated.

1498 Fadrique de Basilae, Burgos, Spain (Friedrich Biel of Basle), prints Doctor Infante, FORMA LIBELLANDI. In Spanish. Type, a fine, heavy Gothic of highly legible design. Set in bold lines full measure across large folio pages. Woodcut initials designed with much and beautiful detail. One of the famous Spanish printers. Began printing about 1496.

1499 Aldus Manutius, Venice, prints Colonna, HYPNEROTOMACHIA POLIPHILI, folio. His most beautiful Roman font. Generally described as on the whole the most admirable illustrated book of the world. Some authorities believe illustrations were from engravings on metal instead of wood. A second edition, printed 46 years later, shows them in excellent state. Practically his last large book.

1499 CHRONICLE, printed in Cologne, says on authority of Ulrich Zell of Hanau (who began printing in Cologne about 1467), that printing was invented in Mainz by Gutenberg, but also mentions earlier Donatus printings in Netherlands. (See 1440-1456.) Names cities in which printing first appeared as: Mainz, Cologne, Strassburg, Venice. Modern authorities believe Strassburg preceded Cologne.

1499-1501 Aldus Manutius, Venice, marries daughter of Andrea de Torresani. Had printed nearly 40 editions by end of this century.

A CHRONOLOGY OF PRINTING

XVI CENTURY

THE ILLUSTRIOUS VENETIAN AND FRENCH PERIOD

1500 Juan and Pablo Hurus, Swiss printers established in Saragossa, Spain, print OFFICIA QUOTIDIANA, which Konrad Haebler, the foremost authority on Spanish printing, calls one of the finest books ever printed anywhere at any time. Gothic type. Richly ornamented.

1500 Govaert (Govuaert) Bac, Antwerp, prints SPYEGHEL DER IONGHERS, a religious book. Dutch. In powerful, carefully designed Gothic. Small, elegant capitals.

1501 Aldus Manutius begins printing with his Aldine types, now called Italic. Based on Italian manuscripts which were calligraphically the finest in Europe.

1501 First book in Italic. Aldus, Venice, VERGILIUS. The famous "little Virgil." Beginning of Aldine Classics in Latin, Italian and Greek, made to sell for low prices. In "lines in praise of the letter-cutter," Aldus gives credit to Francesco da Bologna. About 1820 a copy of this book brought 13 pounds in an English auction.

1501 First Aldine book in Italian. Aldus, Venice, Petrarch, LE COSE VOLGARI, in Italic.

1501 Aldus Manutius begins use of his famous printer's mark—anchor entwined by dolphin. First shown in DANTE, 1502.

1502 Johannis Grieninger, Strassburg, Germany, prints VIRGIL. Roman type. Woodcut illustrations in characteristic vigorous German style. Typography and cuts in close harmony.

1502-1520 Henri Estienne, Paris, creates famous French period, producing more than 100 books.

1503 Giunta press, Venice, produces MISSALE VALLOMBROSA, printing large initials and ornament with the text, instead of leaving blanks to be filled in by hand. (Coloring of such sumptuous liturgical works continued for some time to employ the waning craft of illuminators.)

1504 Peter Hagenbach, Toledo, Spain, prints for Cardinal Ximenes (Cisneros), Archbishop of Toledo, a noble folio, DE LAS TABLAS Y

Escalera Spiritual, in Spanish. Rich Gothic, double column. Initials white on black ground, floriated.

1505 Herman Barckhusen, Rostock, Germany, prints Amerigo Vespucci, Epistola Alberici de Novo Mundo, describing Brazil. Only 3 examples of this letter known.

1505 Aldine Press issues Aeschylus and Aesopus, Greek and Latin.

1505 Henric (Henrick) Eckert van Homberch, Antwerp, prints Passionael of gulden Legende. Dutch. Rich Gothic of considerable weight in double column set solid without paragraphing.

1505 Erhard Ratdolt, Augsburg, prints Missale for Augsburg. Text black and red in two sizes of sturdy, legible Gothic well composed. Episcopal coat of arms in black and red. Fine full-page woodcut depicting the Crucifixion. Printed in black. Illustrations as well as large and handsome initial T (printed in red on elaborately ornamented black and white ground) designed by Jörg Breu of Augsburg under influence of Burgkmair.

1507 Johann Pfeil, Bamberg, prints Bambergische Halsgerichts-Ordnung, an official criminal code. Illustrated with many handsome woodcuts. An example showing how thoroughly the love for illustrated prints had conquered the public mind.

1508 First book printed in Scotland. The Maying and Disporte of Chaucer. Printers, Walter Chepman and Andrew Myllar (also spelled Miller). Type probably imported from Rouen, France, a Blackletter of handsome design. Colophon: Heir endis the maying and disport of Chaucer. Imprentit in the southgait of Edinburgh be Walter chepman and Androw myllar the fourth day of Aprile the yhere of God MCCCCC and VIII.

1508 Emperor Maximilian I appoints Johann Schönsperger Imperial Court Printer and plans many magnificent productions, of which only the Prayer Book (see 1512-1513) and the Theuerdank (see 1517) are completed before his death.

1509 Johann Schöffer, Mainz, prints Reformacion der stat Franckenfort am Meine, the first issue of municipal laws of Frankfurt. Woodcut initials. Full-page woodcut coat of arms on reverse of title-page. Type, a form of Schwabacher.

1509 Leonardo Da Vinci's Roman capitals, drawn on geometrical principles, are produced in Divina Proportione, published by Luca Pacioli.

Geofroy Tory later assails this book as misrepresenting Da Vinci's design. See 1525, Albrecht Dürer; 1529, Geofroy Tory; 1537, Sebastian Serlio.

1509 Henri Estienne, Paris, prints QUINCUPLEX PSALTERIUM. Roman type. Printed in red and black. Ornaments in red fill out broken lines in the columns.

1509 Thielman Kerver, Paris, prints PSALTERIUM. Type, Lettre Bâtarde. Each page with pictorial borders whose illustrations sometimes carry legends in Gothic type. Ten full page cuts printed from metal plates. Red and black.

1510 Jean Grolier (Vicomte d'Aguisy) succeeds his father as Treasurer-General of Duchy of Milan.

1511 Printer in Nuremberg (presumably Hieronymus Hölzel) prints "Grosse Holzschnittpassion" of Albrecht Dürer: PASSIO DOMINI NOSTRI JESU, EX HIERONYMO PADUANO, etc. ("Kleine Holzschnittpassion" printed same year, same printer.)

1511 Jan Seversz, Leyden, prints STIMULUS DIVINI AMORIS in Dutch translation. Gothic type, small but elegant initials and capital letters, and paragraph marks. Type, St. Augustin Flamand.

1512-1513 Johann Schönsperger, Augsburg, prints the famous prayer book of Maximilian I. Type has characteristics of both Schwabacher and Fraktur. Lavishly decorated by Albrecht Dürer, Hans Burgkmair, Lukas Cranach, Hans Grien and Jörg Breu. Only 5 examples known, all on vellum.

1512-1556 Kerver press, under him and later under his widow and sons, produces almost 70 of the luxurious Books of the Hours. This form of book art, except for one final brilliant flowering with Tory's famous production of 1525, entered on a steady decline after the first quarter of the sixteenth century.

1514-1518 First Polyglot Bible. BIBLIA SACRA POLYGLOTTA, known as Complutensian Polyglot. Printed in Alcala (Latinized to Complutum), Spain, by Arnald Guillen de Brocar (Latinized to Arnaldi Gulielmi de Brocario), typographer to Charles V, and one of Spain's famous printers. 6 volumes, folio. Greek, Hebrew, Chaldee, Latin. Titles, headlines, etc., in Gothic of decided Spanish spirit. Latin text in Roman of Venetian character. Produced for and at expense of Cardinal Ximenes

(Cisneros), Archbishop of Toledo, who gave his fortune to it. Published *circa* 1522, after his death. One of the world's splendid works. Had already become scarce in 1572 when Plantin issued his Polyglot Bible.

1514 Johannes Rubeus, Venice, prints Sigismondo Fanti, (Sigismundus de Fantis) THEORICA ET PRACTICA DE MODO SCRIBENDI. A work on penmanship dedicated to the Duke of Ferrara, and ornamented accordingly. Profusely decorated borders, white on black in Florentine manner.

1514 Johann Schönsperger of Augsburg, prints in Nuremberg DIURNALE with a splendid Fraktur type of great size.

1515 Aldus Manutius prints a textbook on grammar with preface addressed to his friend Jean Grolier, the great patron of book art. Probably last book printed by him. Died in this year.

1516 John Froben, Basle, with the great Erasmus, produces Erasmi, NOVUM TESTAMENTUM GRAECUM. New Testament in Greek, many editions 1516-1535.

1516 First dated book-plate known. Engraved by Albrecht Dürer for Johannes Ebner. Undated German book-plates were used in fifteenth century.

1516 Ugo da Carpia, Venice, obtains patent for his invention "di stampare chiaro et scuro," held to be an early attempt at woodcutting in chiaroscuro.

1516 Fadrique de Basilae, Burgos, Spain (Friedrich Biel of Basle), prints DE LA NATURA ANGELICA. Used mostly Gothic, in accordance with Spanish preferences, but also had admirable Roman types, and printed many books in latter face, or with both mixed. His book-designs are strongly Spanish in spirit.

1517 Johann Schönsperger, Nuremberg, prints DIE GEUERLICHEITEN UND EINSTEILS DER GESCHICHTEN DES . . . . . HELDS UND RITTERS HERR TEWRDAWNCKHS. An allegorical record of the bridal tour and adventures of Kaiser Maximilian I. Type, an extraordinary form of the calligraphic "chancellors' " script. The "Theuerdank" type remains a prominent type in German printing for many generations, and is generally considered as the transitional form from old Schwabacher to Fraktur. Illustrated with 118 large woodcuts from drawings by Hans Schaufelein.

1518 First printer in England to use Roman type. Richard Pynson, Pace, ORATIO, quarto. Rough, uncouth type.

1518 Geofroy Tory, after brilliant years as Professor of Philosophy, author, book illuminator and designer, turns to engraving on wood.

1518 One of Hans Holbein's earliest book-designs. Title-page for Sir Thomas More's UTOPIA, printed by Froben in Basle. Title and opening text in Roman type in oblong panel. Initial letter white on ornamented ground. Border in form of arch profusely ornamented. In upper corners on scrolls the words "Hans" and "Holb." Also same year, Erasmus, EPIGRAMMATA, title-page border of naked children in fine running design.

1520 Simon de Colines marries Henri Estienne's widow.

1520 Geofroy Tory begins long and fruitful activity in designing floriated initial letters, mostly Roman, borders and other ornament, strongly marked by Renaissance spirit in opposition to the prevailing Gothic manner. See 1529 for reference to type-design.

1520 John Froben, Basle, prints Erasmus, PARAPHRASES IN EPISTOLAS, with initials, frames to chapter pages and woodcut around title-page by Hans Holbein.

1520 Religious book in Dutch without title printed in Delft by "Cornelis Henric, Lettersnyder." A punch-cutter believed to be the son of the 1496 Henrick, the letter-cutter of Antwerp. Type, Gothic of St. Augustin Flamand character.

1520 Hans Schönsperger (the younger), Augsburg, adopts a type which is held to be unmistakable Fraktur. From about this period, Schwabacher and Fraktur develop as two distinctly different designs of the Germanic type.

1520 Daniel Hopfer, Augsburg, designs fine title-page for a sermon, AIN SERMON, by Martin Luther. Title in large ornamental Gothic on white in oblong panel. Oblong wide and deep frame of border-design, white floriations and forms on black ground. Hopfer is one of the book decorators who brought splendor to the black and white printed page in this period.

1520 Adam Petri, Basle, prints STADTRECHTE UND STATUTEN DER STADT FREIBURG. Illustrated with woodcuts of the city's coat of arms and its patron Saints from drawings by Hans Holbein. Another example of love for ornament in print extending to formal legal documents. See 1507.

1521 Simon de Colines prints Boethius, ARITHMETICA, folio. Ornamental initials and fanciful use of rules.

1521 Richard Pynson, England, prints Henry VIII, ASSERTIO SEPTEM SACRAMENTORUM, quarto. Type from Swiss foundries (Froben). Border and initials copying those of Hans Holbein. A celebrated book. Second edition 1522. Pollard says Pynson obtained from Froben some borders and other material by Hans Holbein, with important effect on English book illustration.

1522 Melchior Lotter, Wittenberg, prints DAS NEWE TESTAMENT DEUTZSCH. The first (so-called September issue) of Martin Luther's version. Illustrated with woodcuts of which those depicting the Apocalypse are partly by Hans Cranach.

1524 About this time Venetian printers begin to differentiate the capital letters U and V. See 1595.

1525 Publication of Albrecht Dürer's famous Roman capitals, drawn on geometrical principles, as expounded by him in the text. See 1509, Da Vinci; 1529, Tory; 1537, Serlio. See following paragraph for description of book.

1525 Unknown printer in Nuremberg, Germany, probably Hieronymus (Jeronymus) Andreä, better known as Formschneyder (the engraver who cut Dürer's drawings in wood), issues Albrecht Dürer, UNTERWEYSUNG DER MESSUNG MIT DEM ZIRCKEL UND RICHTSCHEYT. First issue of Dürer's earliest work on the use of the compass-divider and other draughting instruments. See 1528. Type, rugged Gothic of Fraktur design. One of the earliest types of undoubted Fraktur character.

1525 John Froben, Basle, prints Pliny, HISTORIA MUNDI, folio, illustrated and decorated by Hans Holbein.

1525 Johann Petreius, Nuremberg, issues specimen sheet of types. See 1486, 1561, 1592.

1525 Geofroy Tory prints a Book of the Hours, ornamented and illustrated by himself. Roman type. Equalling the great Pigouchet productions in quality, but wholly different in style, being Renaissance in spirit. Draughtsmanship and wood-engraving so good that it needs no embellishment, though like all Books of the Hours it was intended for hand-coloring. One of the treasures of the Morgan Library is a copy on vellum splendidly illuminated.

1526-1534 Many editions of the Tory Book of the Hours, one by Tory himself in 1530 in smaller format, another by Simon Du Bois in Lettre Bâtarde with differing borders, others by Colines and by Tory's successors. Fourteen known editions altogether, many with borders and other ornament not attributable with certainty to Tory.

1526 Richard Pynson, England, prints CHAUCER complete.

1527 Robert Estienne, Paris, prints Erasmus, SILENI ALCIBIADIS, believed to show first use of Estienne printer's mark designed by Tory—olive tree with some branches spreading, others falling. Motto "Noli altum sapere" (sometimes omitted). Tory's Lorraine Cross signature (sometimes omitted).

1527 Giunta press, Venice, prints Sigismondo Fanti, TRIOMPHO DI FORTUNA. A noble full-page woodcut illustration as title-page, with title in red on scroll within upper part of cut.

1527 Jacob Cromburger, Seville, Spain, prints Pulgar, EL GRAN CAPITAN. Gothic type, woodcut borders, floriated initials white on black. "Foremost printer of his period" in Spain. (Updike.) See 1539-1540.

1528 Hieronymus Andreä, better known as Formschneyder, Nuremberg, prints Dürer, VIER BÜCHER VON MENSCHLICHER PROPORTION. Presswork completed after Dürer's death by his friends and published by his widow. Type, rugged Gothic Fraktur.

1528 Christian Egenolff, Strassburg, prints Lanfrancus, KLEYNE WUNDARTZNEI, one of his earliest known Strassburg productions. See 1530.

1529 Geofroy Tory designs Roman capitals designed on geometrical principles, and publishes them in CHAMP FLEURY. See 1509, Da Vinci; 1525, Dürer; 1537, Serlio.

1529 Geofroy Tory produces CHAMP FLEURY. Small folio. Roman type. Woodcut illustrations, borders and other ornament. Notable for pages showing designs of Roman capitals. Among much fanciful and even fantastic matter, text discusses "invention of antique letters, antique letters drawn in just proportion, and letters both Latin and French." The term "antique" meant Roman letters, and the book inspired a resuscitation of that letter in French typography which starting with Roman type (1470) had quickly become predominatingly Gothic. CHAMP FLEURY was printed by Gilles de Gourmont, first printer of Greek in Paris. Typography not noteworthy. Esteemed today only for its woodcuts and its curious literary content.

1529 In Champ fleury Tory refers to a letter cut by him for Jean Grolier. Various commentators, probably following Bernard, credit him with cutting Italic used by Colines in 1528 and Roman used by Colines and Estienne about 1531. Evidence is slight and open to much doubt.

1529 Simon de Colines, Paris, prints Compendium Veritatum and Decreta Provincialis. Two fine books, with excellent typography and masterful use of the large initials, white with floriated design also white, on black "grible" ground.

1530 Geofroy Tory appointed King's Printer, Paris. Usually referred to as first of the line. Title had been conferred on Jacques Le Rouge in fifteenth century, but there had been no successor before Tory. The books printed by him from 1530 to his death in 1533 are important for decoration, not for typography. All in Roman type.

1530 Christian Egenolff, printer, starts type-foundry in Frankfort, Germany. Later conducted by Egenolff-Berner and the Luther family of type-founders who produced type for early American printers.

1530 Christian Egenolff, Frankfort, prints In adventum D. Caroli V, etc., a poem by Micyllus greeting the Emperor in name of city. Believed to be Egenolff's first Frankfort print.

1534 Christian Egenolff, Frankfort, prints Bible in a Germanic type which is definitely of Schwabacher character.

1534 Simon de Colines, Paris, prints Orentius, Quadrans Astrolabicus. Fine title-page, framed with wide border of ornate designs in white on pebbled (grible) background. Pictorial panels.

1536 Simon de Colines, Paris, prints Ruel, De Natura Stirpium, preface in distinguished Italic after Antonio Blado of Rome. Roman capitals in Aldine manner. Text, large size Roman of Italian character. Fine initials by Geofroy Tory.

1536-1540 About this period Claude Garamond, Geofroy Tory's pupil, credited with having cut a number of types. Some authorities give 1540 as date of cutting Caractères de l'Université, in four sizes of Roman and Italic.

1537 Sebastian Serlio, Italian architect and later Royal Architect for Francis I of France, designs Roman capitals on geometrical principles.

1537 Christian Egenolff, Frankfort, prints Thesaurus pauperum. A popular book of medicines. Rich title decoration and border, containing David and Bathsheba in woodcut by Hans Sebald Beham.

1539 Whitchurch and Grafton, England, print Cranmer's English BIBLE. Type, English Blackletter.

1539-1540 First press in New World. Johann (Juan in Spanish imprints) Cromburger, of Seville, Spain, kin to Jacob (see 1527), obtains exclusive privilege to print in Mexico. Establishes press in city of Mexico, presumably through his foreman Juan Pablos, also termed Paulus in some records. General modern opinion is that Pablos printed first book in 1539: BREVE Y MÁS COMPENDIOSA DOCTRINA CHRISTIANA EN LA LENGUA MEXICANA E CASTELLANA. Some commentators hold that various undated books precede this. A recent European treatise declares that the first book in Mexico (and thus the first book in America) was printed in the Cromburger shop in 1537: a "spiritual ladder to Heaven" devotional book translated into Spanish from Latin.

1539 Colophon of DOCTRINA CHRISTIANA: A honra y gloria de Nuestro Señor Jesu-christo, y de la Virgen Santissima su madre, fue impresa esta Doctrina Christiana por mandado del Señor don Fray Juan de Zumarraga, primer obispo desta gran ciudad de Tenuchtitlan, Mexico desta Nueva España, y á su costa, en casa de Juan Cromberger, año de mill y quinientos y treinte y nueva quarto.

1541 *circa* Claude Garamond cuts his Royal Greek types. (Grec du Roi.)

1544 Robert Estienne, Paris, prints Eusebius, PRAEPARATIO EVANGELICA, folio, in Garamond's Royal Greek type.

1544 Simon de Colines, Paris, prints Orentius, QUADRATURA CIRCULI. Titlepage almost duplicating that of Orentius of 1534, but lacking pictorial panels.

1545 Jean Grolier becomes Treasurer-General of France and retains office until his death in 1565.

1546 John Day, English printer, starts punch-cutting and type-founding to supply his own office.

1551 Robert Estienne, King's Printer for Greek in Paris, after many troubles with ecclesiastical censors, departs for Geneva and prints there till *circa* 1559.

1555 *circa* Christopher Plantin of Tours, France, begins printing in Antwerp, Belgium, founding press which continues under his son-in-law Jean Moeretorf (Latinized to Moretus) and descendants for 312 years. (What is now Belgium was then part of Spanish-ruled Netherlands.)

1556 Jean de Tournes I, Lyons, prints Louise Labe, Euvres. Typographic title in panel, framed by border composed of type ornament. Text pages freely decorated with typographic headbands and tail-pieces, and interesting combinations of type ornament used to ornament blank pages.

1558 Guillaume Morel, Paris, successor to Adrianus Turnebus as King's Printer for Greek, prints Basilii, Conciones de Vita, octavo. Headbands and initials attributed to Geofroy Tory.

1558 Jean de Tournes I, Lyons, France, prints Biblia Sacra, 16mo. Text, delicate Roman, double column. Prologues in Italic probably cut by Robert Granjon. Choice illustrations, decorations and initials.

1559 Christopher Plantin, Antwerp, prints a work superbly illustrated, commemorating funeral of Charles V in Brussels.

1559 John Day, London, prints Cunningham, Cosmographicall Glasse. "A landmark in English book production." Type, vigorous Italic. Woodcut initials, ornamental title-page.

1560 Jean de Tournes I, Lyons, France, prints L'Histoire et Cronique de Messire Jehan Froissart. Red and black title-page, vignette in fine woodcut. 2 volumes. Imprint: Ian de Tournes, Imprimeur du Roy.

1560 Michael Vascosan, Paris, prints Paschalius, Elogium. Handsome, extremely simple Roman title-page, purely typographical, without rules or other ornament. Text a powerful, elegant large Italic. Elaborate woodcut initials.

1561 Valentin Geyssler, Nuremberg, issues type-specimen sheet. See 1486, 1525, 1567, 1592.

1561-1570 Robert Estienne II, King's Printer in Paris.

1562 Paul Manutius, son of Aldus, prints in Rome Theodoret, In Visiones Danielis, folio. Type shows approach to forms familiar today.

1563 Jean de Tournes I, Lyons, prints Calendier Historial. Red and black. Charming woodcuts for each month. No other decoration except typographical ornament for headbands and tail-pieces.

1563 John Day prints Fox, Actes and Monuments of These Latter and Perillous Days. Folio. Type, Blackletter. Illustrated with woodcuts, many full-page, interesting historically, not artistically. This is the first edition of the famous Fox Book of Martyrs. Complete examples are accounted among the rarest books in the English language.

1564 First issue of Martin Luther BIBLE with the woodcuts by Joast Amman, Siegmund Feyerabend, etc. DIE GANTZE HEYLIGE SCHRIFT, TEUTSCH, Frankfort.

1567 Christopher Plantin, Antwerp, issues type specimen, INDEX, SIVE SPECIMEN CHARACTERUM CHRISTOPHORI PLANTINI showing 41 specimens. (Plantin had types and punches from many founders and printers—Garamond, Granjon, Colines, as well as drawing on Netherlands type-founders and his own foundry.)

1570 First edition of Euclid in English. John Day, Euclid, ELEMENTS OF GEOMETRIE.

1571 John Day, England, prints Roger Ascham, SCHOLEMASTER. Interesting use of typographic flowers. Type, firm, flowing Italic, good Roman and Blackletter. Large floriated initials.

1572 The great Plantin Polyglot Bible completed. BIBLIA SACRA POLYGLOTTA, 8 volumes, folio. Latin, Greek, Hebrew and Chaldee, with Syriac in New Testament. Editions on vellum and paper. It is believed that less than 1000 copies were printed. Offered in an English catalogue, 1794, for 14 pounds, 14 shillings.

1578 *circa* Robert Granjon, French type-cutter, called to Rome and works under Cardinal de Medici on Roman and Oriental types. Establishes type-foundry for the Vatican.

1583 First Elzevir press. Set up by Louis Elzevir in Leyden, Spanish Netherlands.

1584 Jean de Tournes II, Lyons, prints LA VITA ET METAMORFOSEO. Illustrations by Bernard Salomon. Italic type ascribed to Robert Granjon.

1584-1585 In Lima, Peru, is established the second press in America. First book probably DOCTRINA CHRISTIANA, printed by Antonio Ricardo. See 1539-1540, first press, Mexico.

1585 University Press, Oxford, England, begins work.

1587 Stampa Vaticana established in the Vatican, Rome, by Sixtus V.

1590 Vatican press, Rome, prints BIBLIA SACRA VULGATAE. A splendid title-page of purely typographic character without ornament. Red and black. Folio.

1592 Egenolff-Berner type-foundry, Frankfort, Germany, issues elaborate type-specimen sheet containing among others Granjon Greek and

Italic and Claude Garamond Roman. Gustav Mori says this is oldest type-foundry specimen sheet in the world. Based on assumption that specimen sheets of Ratdolt (1486), Petreius (1525), Geyssler (1561) and Plantin (1567) were not to sell type, but simply exhibits to book buyers. Title of Egenolff-Berner sheet: SPECIMEN CHARACTERUM SEV TYPORUM PROBATIS, etc.

1593 Shakespeare first quarto (Venus and Adonis). Rough Roman types, poor typography, poor printing. See 1623.

1595-1616 Louis Elzevir introduced distinction between i and j and between u and v in lower case. See 1524.

A CHRONOLOGY OF PRINTING

XVII CENTURY

CONTEMPORARY WITH AMERICAN COLONIAL PRINTING

1605 Juan de la Cuesta, Madrid, Spain, prints first edition (first part) DON QUIXOTE. Second part, same printer, 1615. Quarto. Rough Roman and Italic. See 1780.

1610 Stampa Vaticana and Tipografia Camerale, Rome, Italy, are united.

1616 George Leopold Fuhrmann, Nuremberg, issues type-specimen sheet.

1623 Shakespeare first folio. Text, Roman type, double column. Names of characters in Italics. Second folio 1632. (Issued in facsimile by Methuen and Company, London, 1909, 1910.) Important solely as literary treasure, not as example of printing. Dr. Rosenbach, the American book buyer, paid 6100 pounds for the Burdett-Coutts copy at the sale in 1922.

1625 Bonaventura Elzevir, son of Louis, and Abraham, a nephew, form a partnership and begin publication of classics in 12mo. Characterized by copper-plate title-pages, compact typography, limited margins.

1628 Stampa Vaticana, Rome, Italy, issues specimen book: INDICE DE CARATTERI, CON L'INVENTORI, & NOMI DI ESSI, ESISTENTI NELLA STAMPA VATICANA & CAMERALE.

1634 Bonaventura and Abraham Elzevir print Sallust, CATILINA, one of the good examples of the famous 12mo Elzevir classics. They ran to extremes of merit, some unimportant as examples of typography or printing.

1635 Elzevir press prints Caesar, OPERA, a scarce example of the 12mo series, well printed with many woodcuts and folding maps. One of the good Elzevirs. Printed in Leyden.

1635 Elzevir 12mo Terence, COMOEDIAE SEX, one of the fine editions, beautiful typography, presswork in red and black. Printed in Leyden.

1636 Elzevir 12mo VIRGIL, accounted one of the scarce Elzevirs, if not the scarcest, with exception of the PATTISSIER FRANÇAIS. Held to rank in quality with the TERENCE and the CAESAR.

1637 Star Chamber decree limits number of letter founders in England to four. Reimposed and made more severe, 1644, 1662. Restricts and degrades printing for a long period.

1638 The Rev. Jesse Glover, transporting a wooden press from England to America, dies at sea.

1638 First press in North America. Stephen Daye sets up Glover press in Cambridge, Massachusetts.

1638 Louis Elzevir III establishes press in Amsterdam.

1638-1639 First printed product in North America. Stephen Daye (also spelled by himself "Day"), Cambridge, Massachusetts, prints THE FREEMAN'S OATH (broadside) and AN ALMANACK FOR THE YEAR 1639, calculated for New England. By Mr. Pierce, mariner. No copies extant.

1640 Imprimerie Royale du Louvre (Typographia Regia) created by Louis XIII and Cardinal Richelieu. Revival of French printing follows.

1640 First book printed in North America. First English book printed in all America. Stephen Daye, Cambridge, Massachusetts, prints THE WHOLE BOOKE OF PSALMES (known as the BAY PSALM BOOK). Octavo, 147 leaves, not paged. Rough Roman type. Composition and press-work very poor. Many errors typographical and orthographical. Punctuation particularly bad. Accounted by collectors the most valuable specimen of American printing. Only 10 copies known.

1640 Imprimerie Royale, Paris, under direction of Sebastian Cramoisy, prints first book, DE IMITATIONE CHRISTI, folio. Garamond's Roman Caractères de l'Université. Copper-plate vignettes by Nicolas Poussin of Italy.

1642 Stephen Daye prints what is supposed to be earliest American book-plate. Square border of type ornament, framing name and date in Roman capitals of poor design: STEVEN DAY. JANUARY 11. 1642.

1642 Imprimerie Royale, Paris, prints Richelieu, LES PRINCIPAUX POINCTS DE LA FOY CATHOLIQUE DÉFENDUS. A sumptuous work, in Garamond's Roman and Italic, large size.

1642 Elzevir press, Leyden, produces Cicero, OPERA in 10 volumes, 32mo. A good edition, engraved title-pages, portrait, etc.

1643 Stephen Daye, Cambridge, Massachusetts, prints A LIST OF THESES AT THE COMMENCEMENT OF HARVARD COLLEGE. Printed similar list in

previous year, also CAPITAL LAWS OF MASSACHUSETTS BAY, but no copies have been found.

1644 Stephen Daye supposed to have printed SPELLING BOOK. No copy known.

1645 Stephen Daye, Cambridge, Massachusetts, prints AN ALMANACK FOR THE YEAR 1646, by Samuel Danforth of Harvard College. Only copy known is fragmentary.

1645 *circa* Stephen Daye, Cambridge, Massachusetts, prints A DECLARATION OF FORMER PASSAGES AND PROCEEDINGS BETWIXT THE ENGLISH AND NARROWGANSETS. This is the last Stephen Daye printing recorded. Only a few copies known.

1646-1648 Matthew Daye, Stephen's son, prints on Stephen Daye press. 1646, AN ALMANACK FOR THE YEAR OF OUR LORD 1647 by Samuel Danforth. 1647, AN ALMANACK FOR THE YEAR 1648. 1647, second edition of THE WHOLE BOOKE OF PSALMES, with merely a few changes in spelling and punctuation, only two copies known. 1648, THE BOOKE OF THE GENERAL LAWES AND LIBERTYES CONCERNING THE INHABITANTS OF MASSACHUSETTS, no copy known. 1648, SALEM CATECHISM, no copy known.

1648 Louis Elzevir, Amsterdam, prints HISTORIA NATURALIS BRASILAE. Folio.

1648-1658 Samuel Green prints on Stephen Daye press. First product AN ALMANACK FOR THE YEAR 1649.

1649 Samuel Green, Cambridge, Massachusetts, prints A PLATFORM OF CHURCH DISCIPLINE, by Richard Mather: AN ALMANACK FOR THE YEAR 1650.

1650 Samuel Green, Cambridge, Massachusetts, prints ROXBURY CATECHISM and SEVERAL LAWS AND ORDERS. No copies known.

1651 Samuel Green, Cambridge, Massachusetts, prints THE PSALMES, HYMNS AND SPIRITUAL SONGS OF THE OLD AND NEW TESTAMENT. Only one copy known, in New York Public Library.

1652 Samuel Green, Cambridge, Massachusetts, prints THE SUMME OF CERTAIN SERMONS UPON GENESIS: 15, 6, by Richard Mather. Quarto. 59 pages. Few copies survive.

1654 Daniel Elzevir removes his press to Amsterdam (where he prints to 1680). Establishes type-foundry under management of famous Dutch engraver Christoffel van Dijk. (Also spelled van Dijck.) See 1681.

1654 Samuel Green, Cambridge, Massachusetts, prints John Eliot, INDIAN PRIMER OR CATECHISM, supposed to be first book printed in New England in Indian language. Language of Massachusetts Indians, printed in English characters. No copies known.

1655-1666 Louis Elzevir II and Daniel publish Latin classics in 8vo.

1655 *circa* Samuel Green, Cambridge, Massachusetts, prints AN ALMANACK FOR THE YEAR 1656; THE BOOK OF GENESIS and THE GOSPEL OF MATTHEW, both translated into the Massachusetts Indian language by John Eliot (no copies known); GOD'S MERCY by Charles Chauncey.

1656 Samuel Green, Cambridge, Massachusetts, prints AN ALMANACK FOR THE YEAR 1657; SPIRITUAL MILK FOR BOSTON BABIES IN EITHER ENGLAND by John Cotton. Latter is most famous of New England catechisms. One copy in New York Public Library, bought for $400 in 1894.

1657 Samuel Green, Cambridge, Massachusetts, prints A FAREWELL EXHORTATION TO THE CHURCH AND PEOPLE OF DORCHESTER by Richard Mather; SEVERAL LAWS AND ORDERS; VERSES by John Wilson; THE WATERING OF THE OLIVE PLANT IN CHRIST'S GARDEN by John Fisk. Few copies survive.

1657 The great Brian Walton Polyglot BIBLE is issued in London, England, 6 volumes, folio. Latin, Greek, Hebrew, Arabic, Samaritan, Chaldee, Syriac, Persian, Ethiopic. Thomas Roycroft, printer and publisher.

1657 Imprimerie Royale, Paris, prints a great folio with copper-plate ornament and illustration, HISTOIRE DE L'EMPIRE DE CONSTANTINOPLE.

1658 Samuel Green, Cambridge, Massachusetts, prints AN ALMANACK FOR THIS PRESENT YEAR 1659; A FEW PSALMS IN METRE, translated into the Massachusetts Indian language by John Eliot. (No copy known.) This ends list of printings known to have been done actually on the Stephen Daye press.

1658 Harvard College orders an additional press and types from England to enable Samuel Green to produce John Eliot's BIBLE in the Indian language.

1663 Samuel Green and Marmaduke Johnson, Cambridge, Massachusetts, print the INDIAN BIBLE, translated into the language of the Massachusetts Indians by the Reverend John Eliot. Quarto. Title: The Holy Bible: containing the Old Testament and the New. Translated into the Indian Language, and Ordered to be Printed by the Commissioners of the United Colonies in New England, At the Charge and with the

Consent of the Corporation in England for the Propagation of the Gospel amongst the Indians of New England. Indian title-page: Mamusee Wunneetupanatamwe Up-Biblum God Naneeswe Nukkone Testament kah wonk Wusku Testament. Printed "in full faced bourgeois on brevier body, new type." Eliot's version of Psalms of David in metre, Wame Ketoohomae Uketoohomaongash David, bound with it. About 2000 copies printed. About thirty copies of complete Bible, and about fifteen copies of New Testament only, are known.

1663 William Bradford born, England.

1664 Samuel Green and Marmaduke Johnson print Baxter, CALL TO THE UNCONVERTED, translated by Eliot into the Massachusetts Indian language from Richard Baxter's English edition printed in London in 1657. One thousand copies printed. Until recent years it was believed that no example had survived. In 1925, at sale of Royal Society's books by Sotheby and Company, London, a copy was purchased by the American book buyer Dr. Rosenbach at the sensational figure of 6800 pounds, the record price for any Americana. Believed to be the only copy in the world, and is a presentation volume from Governor Winthrop. Octavo, 5 7/16 inches by 3 7/8 inches. Bound in blue-gray boards, parchment back. Imprint: Printeuoop nashpe Samuel Green kah Marmaduke Johnson.

1665 Nicholas Nicholls issues first type specimen in England.

1666 Marmaduke Johnson, Cambridge, Massachusetts, prints on Harvard College Press, John Eliot's INDIAN GRAMMAR BEGUN. Few copies known.

1668-1672 Dr. John Fell, Dean of Christ Church (later Lord Bishop of Oxford, England), personally and through agents buys types, many thousand matrices and punches in Holland, and brings them to England. Also engages Dutch letter-founders.

1669 Louis and Daniel Elzevir print French BIBLE, 2 volumes, folio.

1669 An edition of John Eliot's INDIAN PRIMER, presumably printed by Marmaduke Johnson. 32mo. 64 leaves unnumbered. Only one copy known.

1672 Dr. John Fell presents Dutch types, matrices and punches to Oxford University Press. Fairly well established that this material represents product of Christoffel van Dijk and Dirck Voskens of Amsterdam.

1675 Daniel Elzevir's Amsterdam edition of St. Augustine, CONFESSIONES, one of the 12mo books considered among the best.

1681 Daniel Elzevir's widow issues broadside specimen offering for sale "proofs of types cut by the late Christoffel van Dyck."

1682 In sale of Dr. Francis Bernard's library, London, 22 Caxtons bring less than 6 pounds.

1683 Joseph Moxon, England, type-founder and printer, produces Volume II of MECHANICK EXERCISES. The first comprehensive textbook of type-founding, composition and printing. Describes, with many illustrations, material and equipment used in printing, and gives detailed instruction for every printing process. Reprinted, in 1896, by Theodore De Vinne, for The Typothetæ of the City of New York.

1685 William Bradford establishes himself as printer in Pennsylvania.

1685 William Bradford prints almanac for 1691, KALENDARIUM PENNSYLVANIENSE OR AMERICA'S MESSINGER, AN ALMANACK by Samuel Atkins.

1685 Samuel Green, Cambridge, Massachusetts, prints second edition of the Reverend John Eliot's INDIAN BIBLE. (See 1663.) Impression begun 1680 with New Testament. 2000 copies printed. About fifty-five copies known.

1686 William Bradford, Philadelphia, Pennsylvania, prints AN EPISTLE FROM JOHN BURNYEAT, a famous Quaker. (Quaker Library, London, has only known copy.)

1686-1692 William Bradford does printing "for Pennsylvania, New York, New Jersey, Connecticut and Rhode Island."

1687 Jacob Scheldt (Jacobus Scheltus), Hague, prints admiralty orders of the States General in Dutch. Type, a richly designed Gothic ascribed to Christoffel van Dijk.

1687-1688 William Bradford proposes to the Friends' Half Year's meeting at Burlington, New Jersey, the printing of a BIBLE in folio by subscription. Unsuccessful.

1688 William Bradford, Philadelphia, Pennsylvania, prints his first book, THE TEMPLE OF WISDOM. A curious work in two parts, dealing of origin of "Heaven, Hell, Angels, Men and Devils, Earth, Stars and Element." Also "the treatise of the four Complexions, With the Causes of Spiritual Sadness, etc." Also "A Collection of Divine Poems," etc. Said to be the first book printed in Philadelphia. Quarto, 212 pages.

1689 François Didot born. Founder of the French family which contributed François Ambroise, Pierre François, Firmin, Pierre l'ainé, Henri, Léger, Didot le jeune and others to French type-founding, printing and publishing. See 1713.

1689 Cotton Mather, Boston, Massachusetts, publishes MEMORABLE PROVIDENCES RELATING TO WITCHCRAFTS AND POSSESSIONS. WITH A DISCOURSE ON THE POWER AND MALICE OF THE DEVILS AND A DISCOURSE ON WITCHCRAFT. 75 pages. Followed in 1691 by another book on witchcraft, 150 pages, and in 1692 by A FURTHER ACCOUNT OF THE NEW ENGLAND WITCHES, by Increase Mather, 50 pages.

1693 Benjamin Harris, Boston, Massachusetts, prints Cotton Mather's famous work, THE WONDERS OF THE INVISIBLE WORLD, containing observations on the "Nature, the Number, and the Operations of the Devils," also "terrible things lately done by the Evil Spirits," and the narrative of a "late Outrage committed by a Knot of Witches in Swedeland." Octavo.

1693 Philippe Granjean appointed royal type-cutter by Louis XIV for Imprimerie Royale (1692), assisted by Louis Luce, begins design of royal fonts, Romain du Roi, to be used exclusively by Imprimerie Royale.

1693 William Bradford appointed Royal Printer for Province of New York. Salary, 40 pounds a year. Holds office more than 50 years.

1693 William Bradford, New York, prints Circular Letter by Colonel Fletcher, Governor. In Dutch and English. Dutch imprint: GEDRUCKT TOT NIEWE YORKE, BY WILLIAM BRADFORDT, ANNO 1693.

1693 Oxford University Press, England, publishes its first type-specimen sheet. See 1668-1672, Fell.

1694 William Bradford, New York, prints LAWS OF THE PROVINCE OF NEW YORK and LAWS AND CHARTERS OF THE CITY OF NEW YORK. Also a tract, SEASONABLE CONSIDERATIONS OFFERED TO THE GOOD PEOPLE OF CONNECTICUT.

1698 Abraham Boekholt, Amsterdam, prints HISTORIE VAN BROER CORNELIS ADRIAENSEN. Type, compact Gothic designed by Christoffel van Dijk.

A CHRONOLOGY OF PRINTING

XVIII CENTURY

CASLON AND BODONI PERIOD—ENGLISH AND AMERICAN PRINTING

1700-1720 Reign of Dutch types in England. "More Dutch type than English."

1702 Imprimerie Royale, Paris, issues specimen sheet showing first of Romain du Roi types. See 1693.

1702 Imprimerie Royale, Paris, prints MEDAILLES (Medals commemorating the principal events in the reign of Louis XIV). A magnificent folio. Copper-plate ornament and borders. Illustrated with copper-plate designs showing the medals. Text and medal illustrations of each page held together by borders of special design for each. Type, Granjean's Roman and Italics (the Romain du Roi begun in 1693).

1704 John Campbell, Boston, Massachusetts, issues THE BOSTON NEWS-LETTER, half-sheet, pica type, folio. First issue for week April 17-April 24. Continued for 72 years. Considered first newspaper in British North America, though preceded by Benjamin Harris' PUBLICK OCCURRENCES, 1690, which was forbidden after one issue.

1706 Benjamin Franklin born, Boston, Massachusetts.

1709 William Bradford appointed by New York Legislature to print ACTS OF ASSEMBLY.

1709 William Bradford, New York, prints LAWS OF NEW JERSEY. Imprint: Printer to the Queen's most Excellent Majesty for the Province of New Jersey. Enlarged edition, 1717.

1709 Timothy Green, New London, prints A CONFESSION OF FAITH (the Saybrook platform of creed and church discipline). First book printed in Connecticut.

1712 William Bradford establishes his son Andrew Sowle as partner in the Philadelphia print-shop.

1713 François Didot founds Didot establishment in Paris. During succeeding century and longer, it is a powerful influence in typography and printing.

1714-1718 Andrew Sowle Bradford (son of William) prints LAWS OF PENNSYLVANIA.

1716 William Caslon opens shop for silver-chasing and engraving bookbinders' stamps. Had reputation for engraving on guns, an art highly esteemed in those days of beautifully ornamented firearms.

1717 James Franklin, Benjamin's brother, returns from England with press and types to print in Boston.

1718 Benjamin Franklin apprenticed to his brother James.

1718 James Franklin, Boston, Massachusetts, prints A SERMON by Thomas Prince. The work on which Benjamin Franklin began to learn printing.

1719 James Franklin issues BOSTON GAZETTE. Half sheet, foolscap, folio. Date of first issue December 21, 1719. Second newspaper in British North America.

1719 T. Fleet, Boston, Massachusetts, prints MOTHER GOOSE'S MELODIES FOR CHILDREN. (Thomas Fleet began printing 1712-1713.)

1719 Andrew Sowle Bradford (William's son), Philadelphia, Pennsylvania, issues AMERICAN WEEKLY MERCURY. First newspaper in Pennsylvania. Half sheet. Discontinued after 1746. Date of first issue, December 22, 1719. Benjamin Franklin later was compositor here for a time.

1721 Benjamin Franklin peddles printed ballads written by himself, Boston, Massachusetts.

1721 Benjamin Franklin, Boston, Massachusetts, contributes articles to NEW ENGLAND COURANT. Edits newspaper temporarily.

1722 William Caslon, London, cuts fonts of Roman, Italic and Hebrew for William Bowyer's sumptuous edition, 3 volumes, folio, of John Selden's WORKS. Published 1726 by subscription through group of booksellers. DEDICATION in large Roman letter. ADDRESS TO THE READER in large Italic. LIFE in great primer Roman. English and Latin text in Roman.

1723 Benjamin Franklin removes to Philadelphia, Pennsylvania. Obtains work in Samuel Keimer's print-shop.

1724 Benjamin Franklin buys type in London. Works there at printing. Publishes DISSERTATION ON LIBERTY AND NECESSITY, PLEASURE AND PAIN.

1725 William Bradford establishes NEW YORK GAZETTE, weekly. Only newspaper in New York till 1733.

1727 Philadelphia, Pennsylvania. Benjamin Franklin becomes manager of Samuel Keimer's print-shop.

1728 John Michael Fleischman, Nuremberg, begins cutting type for Dutch founders. See 1734.

1728 *circa* William Bradford publishes engraved PLAN OF THE CITY OF NEW YORK. (Reproduced in 1836 by the Corporation of New York and in 1849 by order of Congress.)

1728 Benjamin Franklin and Hugh Meredith open printing office in Philadelphia, Pennsylvania.

1728 THE HISTORY OF THE RISE, INCREASE AND PROGRESS OF THE CHRISTIAN PEOPLE CALLED QUAKERS. Printed in Philadelphia, Pennsylvania. Imprint: Samuel Keimer. Completed by Franklin and Meredith.

1728 Philadelphia, Pennsylvania. Benjamin Franklin founds THE SATURDAY EVENING POST.

1729 Benjamin Franklin, Philadelphia, Pennsylvania, proprietor and editor of PENNSYLVANIA GAZETTE. Prints, anonymously, NATURE AND NECESSITY OF A PAPER CURRENCY.

1732 POOR RICHARD'S ALMANACK begins publication. By Benjamin Franklin, under pen-name "Richard Saunders." Continues for about 25 years.

1733 John Pine, England, prints HORACE, the entire text, like the ornament and illustrations, being from engraved copper-plates. An expression of a prevailing taste which at that time was affecting typography and illustration in England and on the Continent.

1734 William Caslon, London, issues his famous type-specimen sheet. Roman, Blackletter, Italic, Coptic, Armenian, Samaritan, Arabic, Hebrew, Greek, ancient Saxon, ancient Gothic. (Facsimile of 1738 copy, identical save for change of address to "Chiswell street," produced for printers and print-users by Mergenthaler Linotype Company, 1923.)

1734 John Michael Fleischman (see 1728) becomes chief punch-cutter for Enschedé type-foundry, Haarlem.

1735 Christopher Sauer establishes press, Germantown, Pennsylvania. (Frankfort, Germany, records show that he obtained some or all of his types from Frankfort type-foundry of Luther family, successors to the Egenolff foundry.)

1737 Pierre Simon Fournier (Fournier le jeune) formulates his point system for types to replace appellations Pica, etc., for denoting body sizes. Later gives elaborated and perfected description in MANUEL

Typographique, 2 volumes. See 1766. Subsequently, François Ambroise Didot, Paris, adopts 72 points to the French inch as his standard of type measurement.

1738 Christopher Sauer, Germantown, prints Calendar for 1739, German language, Gothic type. A complete example preserved in the Municipal Library, Frankfort, Germany.

1739 First book printed in German characters in America. Zionitischer Weyrauchs Hügel printed by Christopher Sauer, Germantown, Pennsylvania.

1739 William Bradford prints The American Almanack for the Year of Christian Account, 1739.

1740-1771 Louis Luce, France, royal type-cutter in succession to Philippe Granjean, designs series of Roman and Italic. Taller than Granjean types and condensed. Acquired by Imprimerie Royale, 1773.

1742 Benjamin Franklin, Philadelphia, Pennsylvania, prints The Charters of the Province of Pensilvania and City of Philadelphia.

1742 William Bradford II establishes The Pennsylvania Journal and Weekly Advertiser. (Under control of him and his son more than 60 years.) Famous for device of divided serpent and motto "Unite or Die."

1742 Pierre Simon Fournier, Paris, publishes specimen book, Modèles des Caractères de l'Imprimerie. One of the fine type specimens. Printed by Jean Joseph Barbou.

1743 Second Bible printed in America. In German, Christopher Sauer, Germantown, Pennsylvania. Gothic long primer type. See 1663 for first Bible (Indian language). See 1776 for second edition Sauer Bible.

1745 Imprimerie Royale, Paris, completes "royal fonts" begun 1693 by Philippe Granjean. Roman and Italic, body and initials, 82 fonts.

1748 Community in Ephrata, Pennsylvania (Die Bruderschaft in Ephrata), prints book for which it makes paper, ink, leather binding and engraved rules and initials. Der Blutige Schauplatz, oder Märtyrer Spiegel. Said to be largest book printed during Colonial period. Editions in both Dutch and German. Printer, Peter Miller.

1750 John Baskerville, Birmingham, England, establishes type-foundry. His type-designs influenced by Caslon purity but powerfully expressing his own inspiration for improved English printing. Represents

a return to the original masters, who were both printers and type-designers. His books set a mark for English and American printers, and establish permanent tendencies in the typography of all nations, particularly on the Continent.

1752 William Bradford dies, 90 years old.

1753 William Bradford II prints LAWS OF NEW JERSEY.

1754 William Bradford, Philadelphia, Pennsylvania, grandson of first printer in Philadelphia and New York, prints THE LIFE AND DEATH OF RICHES AND POVERTY.

1755 *circa* Johann Breitkopf, Leipzig, designs and engraves punches for type that for a long while are eminent in German printing.

1757 Benjamin Franklin publishes WAY TO WEALTH.

1757 John Baskerville, Birmingham, England, prints VIRGIL, royal quarto. His first book. It establishes his European reputation. Title-page, widely spaced capital letters. Running heads, Italic capitals. Latin text, great primer Roman.

1757 James Parker and Company, New Haven, Connecticut, print SOME REMARKS. (Benjamin Franklin partner in "Company.")

1757 John Baskerville issues type-specimen sheet. See 1762.

1757-1759 Cottrell and Jackson are important English type-founders in this period. The Sheffield type-foundry of Stephenson, Blake & Company, the direct descendants of the old English letter foundries, traces its ancestry to them on one side, while on the other it runs to founders of the early sixteenth century.

1758 John Baskerville, Birmingham, England, produces series of types. Prints Milton, PARADISE LOST. Octavo, 2 volumes.

1758 Horace Walpole's private press, The Strawberry Hill Press, prints Walpole, FUGITIVE PIECES, with type equipment from Caslon foundry.

1760 B. Mecom, Boston, Massachusetts, prints THE INTEREST OF GREAT BRITAIN CONSIDERED. Nephew of Benjamin Franklin who financed this printing office.

1761 John Baskerville prints BOOK OF COMMON PRAYER, tall octavo. Ornamental type border around each page. Fine example of his work.

1762 *circa* John Baskerville, Birmingham, issues two broadside specimen sheets. (Two others in 1775.)

1763 William Caslon, London, issues first type specimen in book form in England.

1764 Joseph Fry, physician in Bristol, England, turns to type-founding and produces type under Baskerville influence. Later, after Caslon revival, the Fry foundry issues series similar to that design. In 1795 issues specimen sheet showing return to the Baskerville designs.

1764 John Baskerville prints Aesop, SELECT FABLES, octavo. Generally cited as most beautiful of Baskerville productions.

1766 William Caslon dies.

1766 Pierre Simon Fournier, France (usually called Fournier le jeune), completes MANUEL TYPOGRAPHIQUE, a monument to labors of more than 25 years in design and making of type. A mass of information on printing, particularly on type and type-founding. Comprehensive showing of types and ornaments. Printed by him in 2 volumes (1764-1766). See 1737.

1768 Giambattista Bodoni of Saluzzo, Italy, establishes his press, Stamperia Reale, in Parma, under patronage of Duke of Parma. Prints in Greek, Latin, Italian, French, German and English, with much work in other languages. Eminent as printer and type-designer.

1768 Enschedé type-foundry, Haarlem, issues PROEF VAN LETTEREN, a specimen book showing Netherland Gothic types of the fifteenth century and succeeding types.

1771 Giambattista Bodoni, Parma, Italy, produces specimen book, FREGI E MAJUSCOLE, octavo. Types and decorative material. His first showing of capital letters and of borders. One of the prized specimen catalogues of world. See 1780 to 1813.

1772 Christopher Sauer II, Germantown, Pennsylvania, establishes first regular American type-foundry, with equipment from Germany for German types and English script.

1772 Joachin Ibarra, Madrid, greatest Spanish printer of eighteenth century, prints SALLUST, Spanish and Latin. Called the "stupendous Sallust" by Bodoni. Large, massive Roman, powerful, clear Italic. Engraved title-page and full-page plates. Engraved initials and head and tail-pieces.

1773 John Baskerville prints Shaftesbury, CHARACTERISTICKS OF MEN, octavo. Esteemed among his best. Sallust, OPERA, folio, showing his great primer Roman letter. These were among his last books. Died, 1775.

1776 Christopher Sauer II, Germantown, Pennsylvania, prints second edition of BIBLE, in German. BIBLIA, DAS IST, DIE HEILIGE SCHRIFT, ALTES UND NEUES. Rarer than first edition because during Revolutionary War most copies were destroyed.

1780 Giambattista Bodoni, Parma, prints Anacreon, ODES, 16mo. Wholly in Roman capital letters. Copies printed on various papers, a Bodoni practise in making choice small editions.

1780 *circa* Thomas Bewick's wood-engraving begins to exert strong influence on British book art, and finally directly on type-designs.

1780 Joachin Ibarra, Madrid, prints the Royal Academy edition of DON QUIXOTE, "the finest Don Quixote produced in Spain and perhaps anywhere." 4 volumes, quarto. Roman and Italic type designed by Geronimo Gil for Biblioteca Real. Illustrated with copper-plates.

1781 Stephen Daye wooden press (brought to Cambridge, Massachusetts, 1638) set up in Westminster, Vermont, after various migrations to print THE VERMONT GAZETTE or GREEN MOUNTAIN POST BOY. First newspaper published in Vermont.

1782 First English BIBLE in America. THE HOLY BIBLE, CONTAINING THE OLD AND NEW TESTAMENTS, 2 volumes, printed by R. Aitken, Philadelphia. Third Bible in America, counting Eliot Indian Bible (1663) and first Sauer edition; or fourth Bible, counting both Christopher Sauer editions (1743, 1776).

1783 François Ambroise Didot, Paris, begins printing series of French classic authors.

1783 Stephen Daye wooden press set up in Windsor, Vermont, to print THE VERMONT JOURNAL AND UNIVERSAL ADVERTISER. (Press now preserved in State Capitol, Montpelier, Vermont.)

1784-1789 Under imprint of Société Littéraire Typographique, Kehl, Paris, publishes complete edition Voltaire's works. Two editions: 70 volumes, 8vo, 92 volumes, 12mo. Printed with Baskerville's types which had been sold in France after his death.

1785 Giambattista Bodoni, Parma, prints Anacreon, ODES, in 8vo. Wholly in Roman capital letters like the 16mo Anacreon of 1780.

1785 *circa* Isaiah Thomas, Worcester, Massachusetts, imports "best types obtainable" from Caslon, Fry and Wilson foundries, England, with good assortments of ornament. Books printed by him 1785 to 1810, though

they hardly sustain Franklin's praise, "Baskerville of America," mark decided improvement in American printing.

1785 Isaiah Thomas, Worcester, Massachusetts, issues A Specimen of Isaiah Thomas's Printing Types. "Chiefly manufactured by that great Artist, William Caslon, Esq., of London."

1786 William Martin, said to have learned his trade under Baskerville, begins punch-cutting for George Nicol, London publisher, who with W. Bulmer issues series of luxurious books, many being illustrated with Bewick woodcuts.

1786 Shakspeare Press established in England to print famous Boydell Shakspeare. Folio, 9 volumes, first volume 1792, final volume 1802. Printed by W. Bulmer & Company, London, for John and Josiah Boydell, George and W. Nicol, from types of W. Martin. Types, paper and ink specially made. Large, powerful Roman and Italic, arranged in Bulmer's "grand manner," which in turn was inspired by grand manner of Baskerville and Bodoni. Boydell Shakspeare relies almost wholly on typography for effectiveness.

1786 François Ambroise Didot, Paris, prints Essai de Fables Nouvelles. In small Roman type cut by Firmin Didot.

1788 Giambattista Bodoni, Parma, prints his first Manuale. 360 pages. Shows a range of 100 Roman characters.

1789 Giambattista Bodoni, Parma, prints Tasso, Aminta, quarto. A sumptuous Bodoni. Considered one of the great examples of his manner with large books, in which he excelled. It is said that he thought this his best work.

1789 Isaiah Thomas, Worcester, Massachusetts, prints Sewall, Carmina Sacra, considered his best book.

1789 "Citoyen" Colas, Paris, issues broadside Dépôt des Caractères de Baskerville, offering his types for sale. Later, Baskerville types are used to print official journals of French Republic during the Revolution.

1790 Benjamin Franklin dies, Philadelphia, Pennsylvania.

1790 Thomas Bewick's famous woodcut plates for Quadrupeds, published in Newcastle, England.

1790 *circa* Benjamin Franklin Bache, grandson of Benjamin Franklin, issues 4-page specimen sheet (undated) showing Caslon as well as types cast in Philadelphia from matrices of Fournier, Paris.

1791 Adam Mappa, a Hollander, brings Dutch type-founding equipment to New York and casts type, chiefly for printing in Dutch and German.

1791 Fifth Bible printed in America. Isaiah Thomas, Worcester, Massachusetts.

1791 Isaac Collins, Trenton, New Jersey, prints THE HOLY BIBLE, CONTAINING THE OLD AND NEW TESTAMENTS. First Bible printed in New Jersey. Considered sixth Bible printed in North America, the Thomas Bible of 1791 being held to precede it.

1791 Giambattista Bodoni, Parma, prints folio edition of HORACE, first of a fine series of classics. Follows in 1793 with his famous folio VIRGIL.

1791 Giambattista Bodoni, Parma, prints Anacreon, ODES, small octavo, which has been called a "typographic gem."

1793 Giambattista Bodoni, Parma, prints Gray, POEMS, in English. Quarto. One of his magnificent printed books, not because of ornament (of which it has none) but purely by virtue of typography, arrangement and printing. Large Roman type. Every volume acquired by book-lovers as soon as off the press.

1793-1803 G. W. Panzer, Nuremberg, compiles his 11-volume contribution to the study of the incunabula: ANNALES TYPOGRAPHICI. One of the fundamental works for bibliophiles and typographical students. See index to chronology, Incunabula.

1795 Shakspeare Press, W. Bulmer printer, issues POEMS by Goldsmith and Parnell. Illustrated with woodcuts by Thomas Bewick. One of the best examples of typography harmonizing with the Bewick blocks. Types by William Martin.

1796 W. Bulmer, London, prints Somerville, CHASE, with Bewick woodcuts.

1796 W. Bulmer & Company print for John and Josiah Boydell, London, HISTORY OF THE RIVER THAMES. Folio, 2 volumes. Large Roman type by W. Martin. One of the noted Bulmer productions.

1796 Archibald Binny and James Ronaldson establish type-foundry in Philadelphia and buy up many existing small foundries and equipments.

1796 Alois Senefelder, Munich, after long experimentation with pewter plates, zinc, porcelain and other materials, writes with specially made fatty ink on Solenhofen limestone, and on etching fat-free portion of the stone with weak acid, obtains a printing surface in delicate relief.

1796 Gerhard Führer, prior of Fürstenfeld monastery, begins the work of making a complete catalogue of incunabula in the Bavarian monasteries and cloisters. See index to chronology, Incunabula.

1797 Thomas Bewick's woodcuts for BRITISH BIRDS, published Newcastle, England. A book prized for its plates, not for its typography.

1797 Shakspeare Press, W. Bulmer printer, issues Milton, POETICAL WORKS, folio. illustrated. Another of the luxurious large type Bulmer books. Type, William Martin's Roman and Italic.

1798-1799 Pierre Didot, Paris, issues editions in folio, VIRGIL, 1798, HORACE, 1799. Each limited to 250 copies. Large, brilliant Roman types cast by Firmin Didot. Highly decorated with engravings of designs by Percier, Gérard and Girodet. Intended to surpass the Bodoni folios.

1799 Alois Senefelder, after long labors with printing from lithographic stone treated to give a mechanical printing surface in relief, discovers that fatty ink will make a chemical printing surface, which does not need to be etched into relief. Almost simultaneously, he discovers that he can print by off-set.

A CHRONOLOGY OF PRINTING

XIX CENTURY

(TO 1890)

1800 Continental ardor for Greek and Roman antique (begun in preceding Louis XVI period) at its height. For many years, particularly in France, types, illustration and book-design follow the mode.

1801 Pierre and Firmin Didot (third generation of these famous French printers) print RACINE, folio, 3 volumes, 500 pages each. Pronounced by French jury "the most perfect typographical production of any country or age." Type expressed "antique" taste of the time. Heavy lines accentuated, thin lines and serifs reduced to hairlines. Italic so finished as to seem almost engraved. Published at 1200 francs. Edition, 250 copies.

1802 Giambattista Bodoni, Parma, prints DE L'INFLUENCE DES SCIENCES, octavo. Good example of his French printing.

1806 Giambattista Bodoni, Parma, prints a LORD'S PRAYER in more than 150 languages and dialects. One of his good title-pages.

1807 Fry and Kammerer, Philadelphia, Pennsylvania, print THE COLUMBIAD, a grandiose epic by Joel Barlow. Among the first really pretentious American books. Greatly admired in its period. Text, great primer Roman; notes, small pica Roman. Finely designed Italic. Illustrated with engravings, and printed under the influence of the Bodoni, Baskerville and Bulmer "grand manner." Some of the types probably cut by Archibald Binny.

1809 First specimen book of an American type-foundry. Binny and Ronaldson, Philadelphia, Pennsylvania, show a large series of ornament.

1810 The Charles Whittinghams (uncle and nephew), establish their Chiswick Press (founded 1789), at Chiswick, England. A great influence for improved art of the book.

1810 Isaiah Thomas, Worcester, Massachusetts, writes and prints HISTORY OF PRINTING IN AMERICA. 2 volumes. Octavo. Reprinted for American Antiquarian Society in 1874 by Joel Munsell, Albany, New York.

1813-1818 Giambattista Bodoni dies. Leaves unfinished his great MANUALE TIPOGRAFICO. His widow completes it.

1819 Pierre Didot (son of François Ambroise Didot) prints SPECIMEN DES NOUVEAUX CARACTÈRES DE LA FONDERIE ET DE L'IMPRIMERIE DE PIERRE DIDOT L'AINE. Octavo volume of type specimens. Designed to rival the productions of Bodoni, with whom he had set himself to compete. A historic volume for modern typography. An exposition of the change that had come to French types. Meticulously precise, brilliant, sharp.

1821 William Pickering, England, publishes his first volume. Not a printer, but good taste in typography and book-design made him powerful for revival of English printing. Imprint, Aldine dolphin and anchor.

1824 First series of proceedings and debates in Congress to be contemporaneously reported and published. REGISTER OF DEBATES IN CONGRESS, 14 volumes in 29 books or parts. Began December 6, 1824, with second session of Eighteenth Congress and continued to October 16, 1837, end of the first session of Twenty-fifth Congress.

1826-1838 The great world-work on early printing. Dr. Ludwig Hain, Stuttgart, compiles his huge list of incunabula which has served the world ever since as the fundamental catalogue: REPERTORIUM BIBLIOGRAPHICUM, IN QUO LIBRI OMNES AB ARTE TYPOGRAPHICA INVENTA USQUE AD ANNUM 1500 TYPIS EXPRESSI RECENSENTUR. See index to chronology, Incunabula.

1827 William Pickering publishes THE TREATYSE OF FYSSHINGE WITH AN ANGLE. Printed in types of John Baskerville.

1833 Alexander Wilson and Son, letter-founders, Glasgow, Scotland, issue type-specimen book, quarto, showing Scotch face.

1833 THE CONGRESSIONAL GLOBE. Begins with first session of Twenty-third Congress, December 2, 1833 (duplicating REGISTER OF DEBATES IN CONGRESS for Twenty-third and Twenty-fourth Congresses and first session of Twenty-fifth Congress) and ends with end of Forty-second Congress, March 3, 1873. Complete in 109 quarto books. See 1824, 1834, 1873.

1834 Publication of first volume of ANNALS OF CONGRESS. Last volume published 1856. In all 42 volumes in 51 books or parts, containing debates "compiled from authentic materials" of the first seventeen Congresses and first session of Eighteenth Congress closing May 27, 1824. Volumes 1 and 2 (4 books) report debates and proceedings in First Congress, March 4, 1789, to March 4, 1791. See 1824, 1833, 1873.

1834 William Morris born, Walthamstow, Essex, England. Destined to bring revival of classic principles of book art to entire world, particularly to England, Germany and North America.

1842 Joseph-Ernest Buschmann, Antwerp, founds printing and publishing house which encourages the new Belgian literature of the period by producing popular books profusely illustrated with woodcuts. See 1880.

1844-1845 Revival of Caslon type. The Whittinghams, Chiswick Press, England, resurrect William Caslon's types, fallen into oblivion during a period of inferior printing, to print for Oxford University a fine edition of JUVENAL. Owing to delay, the Whittinghams use it for THE DIARY OF LADY WILLOUGHBY which thus appears first. William Pickering helps to revive its use in England and the United States.

1845-1919 The Reverend C. H. O. Daniel, Provost of Worcester College, England, establishes Daniel Press. Begun at Frome and continued at Oxford.

1853 William Morris and Edward Burne-Jones enter Oxford together—an association important for modern art of the book, and for elevation of arts and crafts generally.

1857-1868 J. W. Holtrop, La Haye, compiles MONUMENTS TYPOGRAPHIQUES DES PAYS-BAS AU 15. SIÈCLE. With facsimiles and analytical studies of the type forms in the Netherland incunabula. An important and still authoritative early contribution to the principle of comparing types of different presses and of different books and thus arriving at definite groupings and developments of incunabula type. See index to chronology, Incunabula.

1859 *circa* William Morris, Edward Burne-Jones, Dante Gabriel Rossetti, William Fulford, Ford Maddox Brown and others organize Morris and Company, for creating mural decoration, architectural carving, glass staining, metal work, jewelry, furniture, in order to beautify craft product.

1867 The Plantin Press (Plantin-Moretus), Antwerp, ceases work after 312 years of printing.

1871 William Morris buys Kelmscott Manor, an Elizabethan house on upper Thames River.

1873 THE CONGRESSIONAL RECORD supersedes THE CONGRESSIONAL GLOBE. First series of proceedings and debates of Congress to be officially reported, printed and published directly by the Government. Issued daily during sessions. Begins with Forty-third Congress and up to 1925 comprises 425 quarto books. See 1824, 1833, 1834.

1876 Edouard Moretus, descendant of Jean Moretus (son-in-law and successor of Christopher Plantin), deeds famous printing establishment, Hotel Plantin-Moretus, to city of Antwerp as typographical museum and monument.

1877 Daniel Press, England, revives use of Fell type, in a reprint of seventeenth century sermon. Fifty copies from "type cast for the Impression from the matrices given the University by Dr. John Fell."

1878 *circa* Marder, Luse and Company (Chicago type-foundry), Chicago, Illinois, begin to produce type on point bodies.

1880 Max Klinger, Munich, decorates and illustrates Apuleius, AMOR UND PSYCHE, published by Theodore Stroefer Kunstverlag. One of the first German books indicating a tendency to conscious book unity. Type, specially designed Roman. All facing pages treated as one with woodcut border specially designed for each. Tail-pieces, headbands and other ornament in woodcut in thorough unity with typography . Illustrated with 46 etchings. Still considered one of the good books.

1880 The printing house founded in Antwerp by Joseph-Ernest Buschmann in 1842 becomes official printer for the Plantin-Moretus Museum.

1882 Max Rooses, Antwerp, produces CHRISTOPHE PLANTIN IMPREMEUR ANVERSAIS, in 2 volumes. One of the important Plantin-Moretus Museum publications.

1882 Bonhoure, Paris, commissions Daniel Vierge to illustrate DON PABLO DE SÉGOVIE, producing one of the comparatively few good books of that period. Drawings photo-engraved on zinc. Vierge's right hand becomes paralyzed when only part of the illustrations are finished. Learns to draw with left hand and later completes full series for Pelletan. See 1902, Modern Period in France.

1883 Launette, Paris, publishes LES QUATRE FILS AYMON, illustrated with photo-engraved cuts of illustrations in line by Eugène Grasset, who later becomes a leader in the new art of the book, contributing decorative style to book-illustration, as well as types and ornament.

1884 Grolier Club, New York, founded for "the literary study and promotion of the arts pertaining to the production of books, including the occasional publication of books designed to illustrate, promote and encourage those arts." Becomes one of the important influences for

book art in America. Founders, William L. Andrews, Theodore L. De Vinne, A. W. Drake, Albert Gallup, Robert Hoe, Brayton Ives, S. W. Marvin, Edward S. Mead and Arthur B. Turnure.

1884 First publication of Grolier Club: A Decree of Star Chamber Concerning Printing. Reprinted from the first edition by Robert Barker, 1637. Printed by DeVinne Press on Holland paper, old style types of great primer size, with Dutch capitals for the Italic letters. Limited to 148 copies.

1885 Second publication of Grolier Club: Rubáiyát of Omar Khayyám. (Fitzgerald translation.) Medium octavo. Printed on Imperial Japan paper, by the De Vinne Press, in old style type of "the size known as English." Headbands in gold and colors from Persian models in Owen Jones' Grammar of Ornament. Limited to 150 copies.

1885 Third publication of Grolier Club: Transactions of the Grolier Club. Demi-quarto, printed on laid paper by Gilliss Brothers and Turnure. Cover, Lalanne charcoal paper on loose boards. Limited to 740 copies.

1885 Professor Otto Hupp, Munich, produces the first of the celebrated Münchener Kalendar series. Magnificently decorated with colored woodcuts engraved from pen drawings of Germanic coats of arms. Fine initials and other ornament. Type, Fraktur. Published by G. J. Manz, München and Regensburg.

1886 United States Type-Founders' Association appoints committee on point system and finally adopts as unit a "point" gained by dividing the pica into 12 equal parts. England adopts point system, 1898.

1886 Fourth publication of Grolier Club: Washington Irving, A History of New York from the Beginning of the World to the End of the Dutch Dynasty, etc. Two frontispieces by George H. Boughton, etched by F. Raubicheck; two etchings by Henry C. Eno; drawing of Stuyvesant vase by Will H. Drake; headbands and tail-pieces designed by Howard Pyle and Will H. Drake; half-titles and initials by Will H. Drake. Etchings of frontispieces in three states. Headbands, tail-pieces and initials printed in brown. Printed by De Vinne Press with Elzevir types. 2 volumes, medium octavo. Bound in boards, covered with orange colored paper. Limited to 175 copies.

1886 Fifth and sixth publications of Grolier Club: A Lecture on Bookbinding as a Fine Art, by Robert Hoe. Demi-quarto, 63 plates by

E. Bierstadt. HISTORIC PRINTING TYPES, a lecture by Theodore L. De Vinne. Demi-quarto, 110 pages, facsimiles of types. Both printed on Holland paper by De Vinne Press. From this period to 1925 the club issues a great number of publications of permanent influence and value—reprints of famous or curious books and texts, works on the various arts of the book, catalogues and bibliographies.

1887 George W. Jones with Robert Hilton founds THE BRITISH PRINTER at Leicester, England. Conducts class of nearly 100 students in typography in Edinburgh in 1889, and a class of nearly 200 in London, 1889-1890.

1887 Charles Draeger, Paris, founds printing establishment which as Draeger Frères becomes one of the great European institutions, representing the efforts and traditions of four generations. Removed in 1900 to Grand-Montrouge (Seine).

1889 Joseph Pennell publishes PEN DRAWING AND PEN DRAUGHTSMEN. In 1895 publishes MODERN ILLUSTRATION. As artist, writer and instructor he exercises powerful influence for improved printing and betterment of graphic arts generally.

1889 Chiswick Press, England, prints for William Morris THE HOUSE OF THE WOLFINGS and THE ROOTS OF THE MOUNTAINS. Though he had been writing and publishing poetry and romances, mostly of medieval flavor, for more than thirty years, it was the work of seeing these two romances through the press that definitely turned his thought toward printing and book-making.

1889 George W. Jones, after much educational work for English printing, begins business in the Ward of Farringdon Without, London, the ward in which Wynkyn De Worde set up his press on the death of Caxton. See 1924, the Modern Period in England.

1889 Grolier Club issues Richard de Bury, PHILOBIBLON. Three volumes, medium quarto. Printed on special paper, "white antique," by De Vinne Press. First volume contains the Latin text of the first edition. Second and third volumes contain English translation by Professor West, with introductory matter and notes. Bound in parchment. Black end-papers stamped in design of red and gold. Headbands, chapter ornaments and initials designed by James West, Charles M. Jenckes and George Wharton Edwards. Profusely rubricated. Large capitals illuminated in gold. Limited to 207 copies.

A CHRONOLOGY OF PRINTING

XIX AND XX CENTURIES

THE MODERN PERIOD IN ENGLAND, FRANCE, GERMANY
AND THE UNITED STATES

COMPILER'S NOTE

THE Chronology of Printing properly ends with the beginning of the Morris movement, the period between that date and the present not being in sufficient perspective for the impersonal attitude essential in chronological work. Selection of a few specific data from the great mass presented by modern book activity necessarily involves assumption of a function belonging to critic and judge, not to a compiler. Professional friends admitted the correctness of this view, but still were of opinion that an attempt should be made. To attain approximately objective treatment, the compilation which follows has been made from the works of the various foreign writers who have described the modern period in England, France and Germany. Where the amount and nature of the material has compelled exercise of personal judgment, the effort has been to select such data as will best exemplify a general tendency, though they may not always be illustrative of the best achievements of a particular press. The survey confines itself largely to those books which because of limited edition are not accessible to many men. The omission of books issued by the regular publishers is not to be taken as indicating that the compiler has ignored them or fails to recognize that many of them are well worth inclusion in any work on modern book art. Their nature and number would have extended the survey into a bibliography, or else would have demanded an indefensibly personal method of selection. It will be observed that the presentation of the modern period is essentially different for each country. Under "France" illustration is the running theme, under "Germany" it is typographical design, and under "England" it is the private press working without over-insistence on any one factor. This treatment is not a matter of the compiler's choice. It is the nature of book-art development in each country.

A CHRONOLOGY OF PRINTING

XIX AND XX CENTURIES

THE MODERN PERIOD IN ENGLAND

1891 William Morris founds Kelmscott Press, most celebrated of private presses of modern times. Between 1891 and 1896 (year of death) publishes 53 books (65 volumes) all in relatively small editions. First book from press, THE STORY OF THE GLITTERING PLAIN.

1891 William Morris, Kelmscott Press, prints Morris, POEMS BY THE WAY, with Golden type designed for THE GOLDEN LEGEND then under production. Printed in red and black. Woodcut borders and initials.

1892 William Morris, Kelmscott Press, prints THE GOLDEN LEGEND with Roman font called Golden because of this book. Designed by Morris after Nicolas Jenson's types of 1470-1476. The design, as he said: "Tends more to the Gothic than does Jenson's."

1892 William Morris, Kelmscott Press, prints Morris, THE DEFENCE OF GUINEVERE AND OTHER POEMS. Printed with Golden type in black and red. Woodcut borders and initials.

1892 William Morris, Kelmscott Press, prints HISTORYES OF TROYE with Troy type, following three ancient types, those of Schöffer of Mainz, Zainer of Augsburg and Koberger of Nuremberg.

1893 William Morris, Kelmscott Press, prints THE ORDER OF CHIVALRY in Chaucer type, a black letter similar to Troy type except in size. (Some of this Chaucer type used in HISTORYES OF TROYE.)

1894 George Allen and Company, London, publish Spenser, THE FIRST BOOK OF THE FAERIE QUEENE, title-page, borders, decoration and illustration by Walter Crane, rendered in woodcut.

1894 William Morris, Kelmscott Press, prints THE TALE OF THE EMPEROR COUSTANS AND OF OVER SEA. Translated by him from old French. Printed in Chaucer type in red and black. Decorative woodcut title, initials and other ornament.

1895 C. H. St. John Hornby, London, establishes Ashendene Press, which during the ensuing thirty years produces many fine books. Caslon and

Fell types used till 1902. Then adopts a type combining Roman and Gothic designed by Emery Walker and S. C. Cockerell. Modelled after Subiaco type of Sweynheym and Pannartz.

1895 William Morris, Kelmscott Press, prints Herrick, POEMS. In Golden type, printed in black and red. Woodcut title, border and initial letters. Octavo. Limited to 250 copies.

1896 William Morris, Kelmscott Press, prints THE EARTHLY PARADISE in Golden type. Woodcut borders and initials. Printed in red and black. 8 volumes, octavo, bound in full limp vellum. Limited to 225 copies.

1896 William Morris, Kelmscott Press, completes his last and greatest work, THE WORKS OF GEOFFREY CHAUCER (known as The Kelmscott Chaucer). Three years of planning and preparation, two years to print. Type, Chaucer Gothic, specially designed. Text two columns to page, bound together by borders, illustrations, frames, initials, and "initial words" of many forms and dimensions. Illustrations (numbering eighty-seven) by Sir Edward Burne-Jones. Borders and initial letters designed by William Morris, engraved on wood by W. H. Hooper. More than a score of the "initial-word" plates by Morris. Ornamental initials throughout. Binding designed by Morris and executed in white pigskin and silver clasps by Cobden-Sanderson bindery. (A copy sold at auction in New York, November, 1924, for $800.)

1896 William Morris dies at Kelmscott Manor, October 3, aged 62 years.

1896 Ricketts and Shannon set up Vale Press. Charles Ricketts (who had designed books before Morris set up Kelmscott Press) designs Vale type, similar to Morris' Golden type, though Ricketts stood for the spirit of the Italian Renaissance rather than for the Gothic spirit which inspired Morris. Same type designed in smaller sizes used as the Avon face for Vale Press SHAKESPEARE. The three Vale presses, type, punches and matrices destroyed in 1904 when press ceases.

1896 First book by Vale Press. Milton, EARLY POEMS, Vale type. Decoration by Charles Ricketts. (Vale Press books composed and fully arranged at Vale Press but printed by Ballantyne Press.)

1896 Walter Crane publishes OF THE DECORATIVE ILLUSTRATION OF BOOKS OLD AND NEW. Illustrated with more than 100 reproductions.

1898 Vale Press issues Keats, POEMS. Woodcut borders, initials and ornament by Charles Ricketts. Octavo, 2 volumes. Limited to 217 copies.

1898-1903 Robert Proctor makes his important contribution to printing history: An Index to the Early Printed Books in the British Museum. A "landmark" in the development and organization of type knowledge. Incunabula types arranged in groups, making possible comparative study of types used by the various early presses and permitting ascription of types in many books unidentified till then. See index to chronology, Incunabula.

1900 T. J. Cobden-Sanderson and Emery Walker set up Doves Press, Hammersmith, England. Design Doves type, following Jenson's Roman closely, but with greater regularity of lines. Serifs square and sometimes of "brickbat" shape, but less markedly so than in Morris Golden type. Doves Press books do not follow Morris in ornament (of which they have little or none), but achieve their style by arrangement of pages, with initial letters designed by Edward Johnston and Graily Hewitt as chief decoration. In many books these were lettered in by hand and illuminated in gold and color.

1901 C. R. Ashbee designs Endeavour type and Prayer Book type for his Essex House Press, London, later established in Chipping Campden, Gloucestershire. Roman type, not following early printers. Used in large size for King Edward's Prayer Book, "one of the most ambitious ventures of any private press."

1901 Vale Press issues Shelley, Poems. Woodcut initials and border of pansies designed by Charles Ricketts. Small octavo, 3 volumes. Limited to 310 copies.

1902 Ashendene Press issues Dante, Inferno. First use of the type specially designed by Walker and Cockerell.

1902 Vale Press issues Ecclesiastes. Composed with King's Fount types designed by Charles Ricketts. Printed in red and black. Imperial octavo.

1902 Vale Press issues Browne, Religio Medici. Woodcut border, vine leaf motif, designed by Charles Ricketts, engraved by C. Keats. Imperial octavo.

1902-1905 Doves Press issues Milton, Paradise Lost. Printed in red and black. Initials in blue and red by Graily Hewitt and Edward Johnston. Small quarto, 2 volumes. Limited to 300 copies.

1903 Ashendene Press issues Dame Berner, A Treatyse of Fysshinge wyth an Angle. Woodcut illustrations. Initials in red. Octavo. Limited to 150 copies.

1903 Lucien Pissarro, Eragny Press (named after his birthplace in France), after previous printing with Ricketts' Vale type, designs Brook type, a Roman of early Italian style. Prints series of books, mostly octavos, with border and other ornament and initials designed by himself and his wife. Initials usually red, borders white on black. Wood-engraving and printing done by him and his wife. Occasional illustration by others. Fine color printing on wood-blocks characterizes this press whose later works are richly ornamental.

1903 Vale Press issues THE LIFE OF BENVENUTO CELLINI. Border and initial letters designed by Charles Ricketts. Imperial octavo, 2 volumes. Limited to 300 copies.

1903 John Lane, London, issues AUBREY BEARDSLEY AND THE YELLOW BOOK.

1903 Doves Press issues Doves BIBLE. Described by Updike as "a masterpiece of restrained style." Printed in black, initials in red. Small folio, 5 volumes, bound in full vellum. Printing completed 1905. Limited edition on hand-made paper. One of the "modern items" prized by collectors.

1904 BIBLIOGRAPHY, last book issued by Vale Press, shows Latin text in Vale, Avon and King's Fount types, all designed by Charles Ricketts.

1904 Eragny Press issues Milton, AREOPAGITICA. Text set in two columns. Printed in red and black. Full-page woodcut border. Large initial in red, many small ornamental initials and woodcut colophon. Designed by Lucien Pissarro. Quarto. Bound in boards decorated by Pissarro. Limited to 134 copies.

1904-1914 Arden Press makes good use of Caslon types, and also shows the influence of the Edward Johnston calligraphic teaching.

1904-1925 Edward Johnston's school of calligraphy creates an enthusiasm in Germany which, for a time, seems greater than that in England. Finally, however, it extends in England to a point where, in the decade up to 1925, it inspires the training of school children in the "manuscript" or "print" hand in place of cursive writing. In 1924-1925 the movement shows signs of spreading in America.

1905 Montallegro type, designed by Herbert P. Horne, England, for Merrymount Press, Boston, Massachusetts (D. Berkeley Updike). Cut by E. P. Prince, who cut types of Kelmscott and Doves Press and other private presses.

1905 Reigate Press, England, issues SURREY AND SUSSEX (extract from Camden's BRITANNIA), title-page and opening pages designed by W. Bernard Adeney with initials and wide borders in woodcut medieval style. Type, Roman old style, following Caslon's design with modifications.

1907 Herbert P. Horne designs Florence type. Following early Italian influence in Roman letter. Used in Arden Press, Letchworth, England, for THE ROMAUNT OF THE ROSE; THE LITTLE FLOWERS OF ST. FRANCIS; Swinburne, SONGS BEFORE SUNRISE; Stevenson, POEMS, and VIRGINIBUS PUERISQUE, and other books, many with chapter headings, headlines and initials in red.

1908 Frank Brangwyn illustrates Raleigh, THE LAST FIGHT OF THE REVENGE. Black and white and color.

1908 Doves Press issues Browning, MEN AND WOMEN. Printed in black and red. Hand-illuminated, "flourished in colored inks" by Edward Johnston. Small quarto, 2 volumes. Limited to 250 copies.

1909 Herbert P. Horne designs Riccardi Press Fount for Medici Society, England. Heavier than Florence design, and more severely Roman. Used for HORACE, MARIUS THE EPICUREAN, SONNETS OF SHAKESPEARE and other works in limited editions. The SONNETS in 11 and 14 point capitals with border from Ratdolt and Pictor's APPIANUS.

1909-1914 Riccardi Press illustrated quartos. THE SONG OF SONGS, 1909. THE THOUGHTS OF MARCUS AURELIUS, 1909. LE MORTE D'ARTHUR, 4 volumes, 1910-1911. EVERYMAN, 1911. THE CANTERBURY TALES, 3 volumes, 1913. Theocritus, BION AND MOSCHUS, 2 volumes, 1914. Type, Riccardi Press Fount.

1909 Doves Press prints WILLIAM CAXTON, a paper read before the Club of Odd Volumes, Boston, by George Parker Winship. Sumptuously printed and bound. Limited to 300 copies.

1909 Doves Press issues Shakespeare, THE TRAGICAL HISTORIE OF HAMLET. Printed in red and black. Initial capital in green applied by hand by Edward Johnston. Small quarto.

1909 Aubrey Beardsley designs title-page, embellishments and illustrations for Malory's KING ARTHUR. Edition follows text as printed 1485 by William Caxton. Spelled in modern style, and set in Caslon style type. (Published by J. M. Dent and Sons.)

1909 Essex House Press prints VOLUSPA. Translation from the Icelandic Elder Vedda. Octavo. Limited to 100 copies.

1909 Doves Press ceases on retirement of Emery Walker.

1909 Ashendene Press issues DANTE, complete works. Illustrated by C. M. Gere. In the type designed by Walker and Cockerell. Instead of printed initials, illuminated initials are applied in gold and color by Graily Hewitt. "The Dante ranks with the Doves Bible and the Kelmscott Chaucer—described as the 'three ideal books of modern typography.' " (Updike.)

1910 Ashendene Press issues VIRGIL. Printed in red and black. Initials, ornament and rubrication applied by hand in red and blue. Royal octavo. Edition limited to 40 copies on vellum.

1912 Philip Lee Warner publishes for Medici Society, London, Charles Kingsley, THE HEROES. Printed in the Riccardi Press Fount by Charles T. Jacobi. Illustrations by W. Russell Flint. Lettering of title-page engraved after design by Miss M. Engall. Central ornament by Flint. Ten full-page illustrations in color. Simple outline initials. Board covers, buckram back.

1913 Ashendene Press issues LE MORTE D'ARTHUR. Another of the fine books, with rubrication and initials in gold and color by Graily Hewitt.

1914 Philip Lee Warner publishes for Medici Society, London, THE FIRST BOOK OF MOSES. Printed in the Riccardi Press Fount by C. T. Jacobi. Illustrations and title-page ornament by E. Cayley Robinson. Lettering of title-page by Miss M. Engall. Ten full-page illustrations in color, plates mounted on tint paper. Simple outline initials. Title-page in black and blue. Board covers, buckram back. Quarto.

1914 C. Lovat Fraser illustrates and decorates PIRATES. Black and white and in color.

1917 A. W. Pollard completes his important work EARLY ILLUSTRATED BOOKS. See index to chronology, Incunabula.

1920 Ashendene Press issues BOCCACCIO. Printed in red, blue and black. Initials, rubrication and ornament by Graily Hewitt.

1920 Morland Press issues BOOKPLATES. Frontispiece from woodcuts in three colors. 69 woodcut illustrations by Frank Brangwyn, printed in black and white and tints. Quarto.

1922 Ashendene Press issues Spenser, THE FAERIE QUEENE. Text in double column. Printed in red and black. Woodcut initials of many sizes in red and blue. Colophon white on red. Folio. Limited to 180 copies.

1922 Beaumont Press issues Svetlov, THAMAR KARSAVINA. Illustrated by Claud Lovat Fraser, Randolphe Schwabe, A. P. Allinson and others. About fifty of the illustrations colored by hand. Small folio.

1923 Publication of CLAUD LOVAT FRASER, with examples of his work reproduced in collotype and in line, articles by John Drinkwater and Albert Rutherston. 450 signed copies. Quarto.

1923 Beaumont Press issues Symons, THE CAFÉ ROYAL AND OTHER ESSAYS. Title-page cut on wood and printed in colors. Woodcut vignettes and ornament designed by Randolphe Schwabe. Typography, binding and production by C. W. Beaumont. Octavo.

1924 Celebration in London of fiftieth anniversary in printing industry of George W. Jones, proprietor of the printing establishment The Sign of the Dolphin. One of the leaders in English printing revival. Governor of St. Bride Foundation Institute. Representative of the Federation of Master Printers of Great Britain and Ireland on the committee appointed by the Lords of the Treasury to advise H. M. Stationery Office on the choice of types and modes of display in government printing. Representative of the Federation on the Industrial Art Committee of the Federation of British Industries. Member of the committee of the Royal Society of Arts on Book Production. Member of the L. C. C. Consultative Committee on Book Production, etc.

1924 Beaumont Press issues Constantini, THE BIRTH, LIFE AND DEATH OF SCARAMOUCH. Typography and binding by C. W. Beaumont. Cover-design by Randolphe Schwabe. Octavo. Limited to 310 copies.

1924 Ernest Benn issues Stanley Morison, FOUR CENTURIES OF FINE PRINTING. Super folio. Over 600 collotype plates reproducing examples of printing from 1500 to 1914. Collotypes by Albert Frisch, Berlin. Printed by Walter Lewis, University Press, Cambridge, England. Limited to 390 copies.

1890 Société Artistique du Livre Illustré, Paris, organized by Gérardin, Lepère, Tinayre, Moulignié, Bellenger, Dété, Paillard and other artists and wood-engravers, issues a series of monographs under PARIS VIVANT, protesting against the lowering of book art.

1891 Draeger Frères, Paris, print TRENTE ET QUARANTE, illustrated by H. Vogel, ornamented by A. Giraldon, etchings and engravings by Verdoux, Ducourtioux and Huillard.

1894 Henri Beraldi, Paris, bibliophile and director of Société des Amis des Livres, helps toward regeneration of book art by calling on Auguste Lepère, then considered a revolutionary in illustration, to make his crayon drawings for woodcuts illustrating PAYSAGES PARISIENNES. A sensation of its time, followed in 1895 by PARIS AU HASARD illustrated by the same artist. Two books that remain on record as distinguished exemplars of French book art of that period.

1896 Édouard Pelletan, Paris, establishes publishing house to bring back the typographical conception to the French book. Issues as introductory publication LE LIVRE, a manifesto expressing his views, following with LETTRE AUX BIBLIOPHILES and DEUXIÈME LETTRE AUX BIBLIOPHILES. "In the annals of French book production, the name of Édouard Pelletan will be inscribed in letters of gold." (Léon Pichon.)

1896 Édouard Pelletan issues his first book, Alfred de Musset, LES NUITS ET SOUVENIR. Portrait of Musset after David D'Angers, interpreted in woodcut by Florian. Illustrations, numbering with headbands, tailpieces and full-page cuts more than one hundred, by A. Gérardin, engraved on wood by Florian. The first of his splendid title-pages in black and red with his publishing emblem in brown. Quarto and octavo, with different typography for each. Printed by Maison Lahure on hand presses. Limited to 500 copies.

1896 Édouard Pelletan publishes Moreau, LES PETITS CONTES À MA SOEUR. Type, Didot 11 point. 63 illustrations by L. Dunki, engraved by

Clément Bellenger. Printed by Maison Lahure on hand presses. Limited to 350 copies.

1896 Édouard Pelletan publishes Villon, Les Ballades. Type, old Roman of Dutch model from Deberny foundry, refined. Title-page based in both typography and construction on fifteenth century book of Villon's period. Capitals at head of verses in red. 70 illustrations by A. Gérardin, engraved by Julian Tinayre. Printed on hand press by Maison Lahure. Limited to 350 copies.

1896 Édouard Pelletan issues L'Oarystis. Greek text with new translation into French by A. Bellessort, with a disquisition by Anatole France. Illustrations by Georges Bellenger, engraved by Froment. Quarto and octavo. Printed by Maison Lahure on hand presses. Limited to 350 examples.

1897 Georges Peignot (G. Peignot & Fils, Paris), under his father, Gustave, and before death of latter in 1899, issues Grasset type, designed by Eugène Grasset, with series of ornament.

1897 Beltrand, Florian, Froment and other wood-engravers, with the artists and engravers of Société Artistique du Livre Illustré (see 1890) form a group which issues L'Image, a review protesting against the tendency of the photograph and of photogravure to supplant the art of the illustrator and the wood-engraver.

1897 Floury, Paris, issues De la Typographie et de l' Harmonie de la Page Imprimée, an argument in favor of the William Morris principles in book-design. Executed by Charles Ricketts and Lucien Pissarro.

1897-1899 Édouard Pelletan issues five books demonstrating his interest in illustration and engraving as well as typography. Chateaubriand, Les Aventures du Dernier Abencerages. Alfred de Vigny, Servitude et Grandeur Militaires, 2 volumes. Alfred de Vigny, Les Destinées. Alfred de Vigny, Sully Prudhomme. Jean Lorrain, La Mandragore. Showing in all more than 225 illustrations by Daniel Vierge, Dunki, Georges Bellenger, Bellery-Desfontaines, Pille and Florian, engraved by F. and E. Florian, Clément Bellenger, Emile and Eugéne Froment and Julian Tinayre. Printed by Maison Lahure on hand presses (La Mandragore in color). Limited editions, 150 to 350 copies.

1899 The group of French artists and wood-engravers (see 1890, 1897) issue a series of charming small editions of authors, Les Minutes Parisiennes, illustrated with woodcuts produced under joint direction,

with typography, decoration and other details of the book arranged in harmony. The first book, MIDI, in preface pleads the cause of the illustrator and the engraver, and warns that the photograph and the easy reproduction methods attending it are dangerous to French art.

1899 Auguste Lepère is represented by more than forty woodcuts in LA CITÉ ET L'ILE SAINT-LOUIS, one of the best of LES MINUTES PARISIENNES.

1900-1902 The Peignot type-foundries (Peignot & Fils, Paris) issue new typographical designs, among them Auriol Roman and Italic type designed by Georges Auriol and a face with series of ornaments designed by Bellery-Desfontaines, a leader of the school which holds that book-illustration should be decorative of the book as well as illustrative of the text.

1900 Imprimerie Nationale, Paris, begins production of the monumental HISTOIRE DE L'IMPRIMERIE EN FRANCE AU XV^e ET AU XVI^e SIÈCLE, by Anatole Claudin. Prefatory text in Garamond's characters, text in Granjean's Romain du Roi, large size, fonts cast specially for this work. Produced under guidance of Arthur Christian, director of the establishment, and completed before his death in 1906. "Probably the finest book on printing that has ever been published." (Updike.)

1900 Édouard Pelletan issues two volumes, Renan, PRIÈRE SUR L'ACROPOLE and Nodier, HISTOIRE DU CHIEN DE BRISQUET (with LETTRE À JEANNE by Anatole France). Illustrations by Bellery-Desfontaines and Steinlen, engraved by Emile and Eugène Froment, Ernest and Frédéric Florian and Deloche. Printed in colors by Maison Lahure on hand presses. Limited respectively to 400 and 127 copies. The Renan is held to be best illustrative of the work of this period.

1900 Édouard Pelletan issues JEAN GUTENBERG. Illustrations by Georges Bellenger, Bellery-Desfontaines, Steinlen and Frédéric Florian, engraved by Emile and Eugène Froment, Ernest and Frédéric Florian and Deloche. Quarto. Printed by Maison Lahure on hand presses. Limited to 113 copies. Also issues in this year LES SYRACUSAINES, illustrations by Marcel Pille, engraved by Froment. Quarto. Printed by Maison Lahure on hand presses. Limited to 350 copies.

1900 Imprimerie Nationale, Paris, prints a magnificent folio A LA MÉMOIRE DE JEAN GUTENBERG. (Hommage de l'Imprimerie Nationale et de la Bibliothèque Nationale.) Title-page black and red with copperplate vignette.

1901 Édouard Pelletan issues Maurice de Guérin, Poèmes en Prose ("Le Centaure" and "La Bacchante"). Illustrations and decoration by Bellery-Desfontaines, engraved by Ernest Florian. Quarto and octavo. Printed by Maison Lahure in six colors on hand presses. Limited to 167 copies.

1901 Draeger Frères produce Au Pays de Don Quichotte, illustrated by Daniel Vierge.

1901-1902 Édouard Pelletan issues two volumes which well illustrate his manner of combining the woodcut with typography. Anatole France, L'Affaire Crainquebille, 1901. Illustrated with 63 drawings by Steinlen, engraved by Deloche, Ernest and Frédéric Florian, Emile and Eugène Froment, Gusman, Mathieu and Perrichon. Printed by Maison Lahure in black and red on hand presses. Limited to 400 copies. Victor Hugo, Cinq Poèmes, 1902. Illustrated with 35 illustrations by A. Rodin, Eugène Carrière, Daniel Vierge, Willette, Dunki and Steinlen, engraved by Ernest and Frédéric Florian, Crosbie, Duplessis, Perrichon and Emile and Eugène Froment. Printed by Maison Lahure in red and black on hand presses. Limited to 225 copies.

1902 Sale of Vicomte de la Croix-Laval's library, notable because books were catalogued not by authors or subjects, but by names of the binders. A demonstration of the commanding position in France of the fine art of book covers as expressed in costly bindings.

1902-1912 In these ten years Édouard Pelletan issues more than forty books with wide variety of typography, illustrated by artists working in many mediums, and employing most known processes of reproduction. (Selected representative works enumerated under dates that follow.)

1902 Daniel Vierge completes illustrations for Don Pablo de Ségovie (see 1882). Published by Pelletan. 122 line drawings with carefully handled detail reproduced in heliogravure, plates retouched by the artist. Limited to 400 examples.

1902 Ambroise Vollard issues Daphnis et Chloé and Verlaine, Parallèlement. Both illustrated with lithographs by Pierre Bonnard, the painter, whose plates stand as most interesting examples of the impressionistic school. Not eminent as book art from the point of view of unity, but considered fine examples of pictorial art.

1902 Ambroise Vollard, Paris, issues Le Jardin des Supplices. Illustrated with 20 designs by Auguste Rodin. Quarto. Printed on specially made paper watermarked with title of book. Limited to 150 copies.

1903 Édouard Pelletan publishes Beaumarchais, Le Barbier de Séville. With 62 illustrations and ornaments by Daniel Vierge. Title-page in black, red and brown. Engravings by Aubert, Florian, Froment, Perrichon and Tinayre. Printed by Maison Lahure in red and black on hand presses. Limited to 350 copies.

1904 Jacques Beltrand produces Les Petits Métiers. Illustrations and wood-engraving by himself. Type, a rugged, almost crude Roman, having woodcut character. One of a series of similar books.

1904 Édouard Pelletan issues Goethe, Le Roi des Aulnes. Poem in first part of book, in German, with translation opposite. German text in Gothic designed by Arthur Christian, director of Imprimerie Nationale, derived from a Plantin Civilité type. Second part of book contains Schubert's musical score, designed in accordance with Gothic decoration used for whole volume. With 7 full page and various headpieces in color by Bellery-Desfontaines, engraved by Ernest Florian. Printed by Imprimerie Nationale in four colors. Limited to 200 copies.

1906 Auguste Lepère produces Erasmus, L'Éloge de la Folie, with illustration, typography and printing in colors by himself. Considered the best of a series of similar books, with many interesting problems in composition and printing. Under patronage of Société des Amis des Livres, a society of book-lovers.

1906 Adolphe Giraldon produces fine decorative illustrations for Virgil, Les Éclogues. Pen drawings on wood engraved by Florian and printed in color. Roman type with ornamented capitals.

1907-1914 Prince D'Essling compiles his Les Livres à Figures Vénitiens de la Fin du XV^e^ Siècle et du Commencement du XVI^e^, one of the fine works on Venetian printing. In 3 volumes, folio, plates in photogravure, more than 2000 reproductions of woodcuts.

1907 Édouard Pelletan issues Molière, Le Misanthrope. Title-page typography green, black and red with vignette (publisher's device) in brown. Granjean type used for comedies, Garamond for preface and dialogues. Titles, leading names, etc., in green and red. With 26 illustrations by Jeanniot, of which 14 were etched by Delatre, 12 engraved

on wood by Ernest Florian. Head and tail-pieces in simple outline engraved by Florian. Full-page illustrations printed in sepia and sanguine broken with black. Printed by Imprimerie Nationale. Limited to 320 copies. In this book Pelletan's effort was to suggest, by typography and illustration, the splendor of society in the period of Louis XIV.

1909 Charles Jouas, after illustrating many books, produces his famous drawings and etchings for La Cathédrale, which is considered the best example of his art in blending minute architectural drawing with the book-decorative style.

1910 Édouard Pelletan issues Richepin, La Chanson des Gueux. With 252 illustrations by Steinlen, drawn in lithographic crayon as if for stone, reproduced in photogravure on zinc process blocks retouched by the artist and by Florian. Result described by Pelletan as "undistinguishable from lithography." Printed by Maison Lahure on hand presses in black and red. Limited to 325 copies.

1911 Deplanche, Paris, issues Apollinaire, Le Bestiare, illustrated with conventionalized representations of animals, birds and fish by Raoul Dufuy, one of the advanced modernist painters. Engravings on wood representing the increasing tendency to masses, more or less coarse, high lights and elimination of intermediary tones and details.

1911 Édouard Pelletan, Paris, issues Beranger, Les Résurrections Italiennes. Title-page, red and black. Vignette brown. Decorated with 13 designs by Eugène Grasset. Handsome headpieces and other ornament with fine simplicity of line, printed in black. Simple Roman initials of handsome form printed in red. Folio numbers red. Printed by Imprimerie Nationale.

1912 Édouard Pelletan issues Anatole France, La Rotisserie de la Reine Pédauque. Seven years in making, and known as "his swan song." Type, Garamond's Italic on 16-point body from Imprimerie Nationale fonts. Title-page red and black with vignette (publisher's mark) brown. Illustrated with 190 designs by Auguste Leroux, engraved on wood by Duplessis, Ernest Florian, Eugène and Emile Froment, P. Gusman and Perrichon. Of the wood-engraving, Pelletan said: "It is a résumé of the art since the regeneration of this process about 1830. All styles are represented—the romantic facsimile, the style of 1860, the color engraving by multiple plates of 1890." Quarto. Printed in four colors by Imprimerie Nationale. Limited to 410 copies.

1912 Édouard Pelletan dies, after publishing a little more than 60 books. His son-in-law, R. Helleu, assumes management of the press, and under imprint of Bibliothèque Helleu-Pelletan and Helleu and Sergent issues series of books in the Pelletan tradition: La Princess de Clèves; La Colline Inspirée, type by Deberny, woodcuts by P. Colin; Les Vielles Tentaculaires, illustrated with woodcuts by Frank Brangwyn.

1912 R. Helleu gives finishing touch to Pelletan's almost completed book, Hesiod, Les Travaux et les Jours with Anatole France, Terre et l'Homme. Referred to by bibliophiles as one of the very fine French books. Title-page in black and red with vignette (publisher's mark) brown. Illustrated with 114 original woodcuts by Paul Émile Colin. Woodcut illustrations printed in black, woodcut decoration in color, initials (in simple Roman type) red. Quarto. Printed by Imprimerie Nationale. Limited to 355 copies.

1912 R. Helleu issues Le Dernier Livre d'Édouard Pelletan, commemorating his last book.

1913 Georges Crès and Company, Paris, publish Villiers de l'Isle Adam, Le Nouveau Monde. With 15 woodcuts by P. E. Vibert, printed in red and green. Title-page red, green and black.

1913 Maurice Denis, painter and designer of cartoons for stained glass, murals and other ecclesiastical subjects, makes color illustrations for a fine edition of St. Francis, Les Petites Fleurs. Second edition illustrated in black and white translations on wood by Jacques Beltrand. Under Beltrand's direction, the ornamentation, engraving and typography (type, small Roman of early Venetian character) are conceived in terms of equal value. Small edition printed on hand presses.

1913 Beginning of work under André Peignot on a fine edition of Villon, Le Grand Testament. Specially designed type by Peignot. Illustrated with etchings by Bernard Naudin. One of his most successful pictorial works. Taylor, who saw book under way in 1914, called it "a most remarkable edition." The artist did not, however, yield his conception to any book-decorative plan, and the book is a noted pictorial volume rather than an example of unified book arts.

1914 François Bernouard, Paris, issues Frolilège des Poèmes de Théophile de Viau. Illustrated by Charles de Fontenay in the extreme modern revival of the naive drawing and wood-engraving of the first illustrated

incunabula. Typography not closely related to the book, which is frankly treated as a vehicle for text and illustration as separate problems.

1914 G. Peignot & Fils issue their brochure Les Cochins, describing the Cochin series of type, based on eighteenth century copper-engraved and typographic material.

1914 An enumeration of this period names as publishers and book-lovers working for French book art: Georges Crès and Company, Jules Meynial, Léon Pichon, A. van Bever, A. Blaizot, L. Carteret, H. Floury, F. Ferrond, R. Helleu, René Kieffer, E. Rey, Octave Charpentier, E. Lévy, H. Piazza, Henri Beraldi, publisher and leader in Société des Amis des Livres, Eugène Rodriguez, president of book-lovers' society Les Cent Bibliophiles. Among book-lovers' societies besides these two active in subscribing for and otherwise supporting good books, Société du Livre d'Art Contemporain, Le Livre Contemporain, and Société Normande du Livre Illustré.

1916 R. Helleu, Paris, prints Anatole France, Ce Que Disent Nos Morts. Decorated with 12 designs by Bernard Naudin in woodcut. Printed in three colors by Imprimerie Nationale. Quarto. Four limited editions on four qualities of paper.

1918 Léon Pichon issues Oscar Wilde, Ballade de la Geôle de Reading. Type, small black Roman designed and used with the purpose of conforming to the subject. With 25 symbolic illustrations by Jean Gabriel Daregnès in woodcut printed from the block in two colors. Considered in France as one of the "most curious" and most sympathetically illustrated modern books.

1918 Léon Pichon issues Virgil, Copa. Type, small Roman, pro-em in Italics. Illustrated with wood-engravings from diptyches by Carlègle, simple line relying on black masses for the chief effect.

1918 The paper book cover, previously considered temporary because of the national habit of binding books privately, receives more attention in the period beginning about this time. French book producers also begin using ornamental end-papers, and by 1925 are showing good progress in that previously neglected field.

1919 Helleu and Sergent issue Verlaine, Les Fêtes Galantes. Illustrated by Charles Guérin with crayon lithographs. An example of pictorial art like the Bonnard books. See 1902.

1919 Léon Pichon issues Daphnis et Chloé. Type of Jenson character. Illustrated by Carlègle in line admired for purity and elegance. Considered by French book collectors as a good example of the modern tendency toward combining the illustrative and the decorative as equally vital elements of the book. An example of Pichon's efforts toward unity in the French book on the Morris principles.

1919 Eragny Press, London, prints for Société Les Cent Bibliophiles, France, Histoire de la Reine du Matin et de Soliman, Prince des Genies. In the Brook Riccardi type. Illustration by Lucien Pissarro; engravings on wood by Lucien and Esther Pissarro. Specially made French paper. Illustrations partly in tint, partly in rich color plates. Initials in gold with colored design as background, medieval style. Title-page in gold and olive on left-hand page. First page text within rich colored illustration and border, gold initial. Considered one of the best works of this press in the field of sumptuous productions.

1920 Léon Pichon issues Corbière, Armor. Illustrated with woodcuts by André Deslignères. Highly modern use of black masses and high lights, wholly devoid of half-tones. Each poem led by illustration that serves as headband, followed by tail-piece of strictly related character, with frieze-like ornamental designs running through intermediate pages to hold the decorative scheme together. Type, rugged small Roman of woodcut character.

1920 Léon Pichon issues De Nerval, La Main Enchantée. Type of fifteenth century Venetian character. Illustrated with 30 woodcuts by Jean Gabriel Daregnès, arranged to serve as decorative factors in the scheme of the book.

1920 Berger-Levrault, Paris, issue La Belle Histoire Que Voilà, written and illustrated with pen drawings by André Hellé, a favorite child's illustrator. Typography subordinate to pictures.

1920 Émile Bernard designs and engraves on wood illustrations for Villon, Oeuvres. Type, an ornamental Lettre Bâtarde with fantastic initials. Illustrations with the feeling of pen drawing, engraved and printed without heavy blacks nor much white, detail occupying the greater part of the block. Published by Ambroise Vollard.

1920 Maxime Dethomas, architect, painter and designer of gardens and theatrical scenery illustrates Chateaubriand, La Campagne Romaine.

Pictorial representations in black masses and high lights without intermediary tones, so treated as to be decorative. Typography in graceful open Roman appropriate to the extensive white space in the woodcuts.

1920 Émile Paul, Paris, issues Les Jardins, illustrated with wood-engravings by Paul Vera, one of the ultra-modern artists, who, however, uses the prisms and planes of cubism with considerable success to obtain decorative effects.

1921 G. and A. Mornay, Paris, issue Anatole France, Le Comte Morin. Illustrated with wood-engravings by Henri Barthélémy. Type specially designed, closely assimilated to the wood-block.

1921 René Kieffer, Paris, publishes Poe, Manuscrit Trouvé dans une Bouteille. Illustrated with woodcuts by Pierre Falké, colored by hand. Paper covers. Limited edition. One of a series illustrated in color, etchings and woodcuts, after originals by Jonas, Picart-Ledoux, Siméon, Thomas, Desteract, Orazi, Dethomas, King and Moreau. See 1922.

1921 Librairie Garnier, Paris, issues Les Saisons Normandes. Type, a large, medium-heavy Italic with Roman initials on tint-block. Illustrated by Pierre Gusman with woodcuts engraved by him. Masses and high lights, but with much detail expressed in finished line, and considerable use of intermediary tones. Printed in black and light orange.

1921 Louis Jou, Paris, compositor, decorator, wood-engraver, after long work in book illustrating, publishes Machiavelli, Le Prince, with illustrations all fulfilling their part as decoration, tied in with text as headbands and tail-pieces while sustaining their pictorial task. Jou's Spanish extraction evident in the character of the book, which is eloquent of the Spanish Renaissance. Published under imprint of Jou and Bosviel.

1921 Jou and Bosviel issue La Boétie, De la Servitude Volontaire ou le Contr'un. Another fine example of unified illustration and decoration, wood-engraving and typography, and also a characteristically Spanish book.

1921 Léon Pichon issues Les Plus Jolies Roses de L'Anthologie Grecque. Titles in rugged Roman type, text in similarly rugged, very black Italic. Illustrated by Carlègle. Drawings, wood-blocks and typography thoroughly in unity.

1921 Bossard, Paris, issues L'Apocalypse, illustrated with designs and wood-engravings by F. A. Cosyns, using black and white with little intermediary detail, but with carefully drawn and perfected line.

1921 Georges Crès and Company, Paris, issue Anatole France, Le Livre de Mon Ami. Illustrated with wood-engravings by F. Siméon.

1922 René Kieffer, Paris, publishes Balzac, Le Père Goriot. Illustrated with 140 woodcuts in color by P. Quint. Paper covers. One of an extensive series printed in editions limited to a few hundred each, illustrated in woodcut or etchings, black and white and colors, by Georges Bruger, Paul Guignebault, Robert Bonfils, Pierre Brissaud, J. B. Vettiner, G. Le Meilleur, André Domin, J. Hamman, E. Legrand, Joseph Hémard, Pierre Falké, Lucian Simon and others. See 1921.

1922 G. and A. Mornay, Paris, issue Chadourne, Le Pot au Noir. Illustrated with woodcuts in rich, fantastic design with use throughout of tone, by Pierre Falké. Printed in black and white, colored by hand with stencil. Typography subordinated to illustration, but planned in harmony with weight and color of cuts.

1923 Arthème Fayard, Paris, issues Duvernois, Crapotte. Type, very small, compact Roman with plain Roman initials placed in unusual manner. Illustrations by Achille Ouvré, engraved on wood by him. In modern manner with black masses, but qualified by the more precise technique of his previous work as engraver on copper.

1923 René Kieffer, Paris, publishes Les Pastorales de Théocrite. Illustrated with woodcuts by J. B. Vettiner, in black and white. More than 100 illustrations, chapter headings and tail-pieces. No color. Paper covers. Limited edition.

1923 H. Floury, Paris, publishes Colmar en France. Quarto. Plates in color and in black and white reproducing Hansi's paintings and etchings of Colmar. Some plates printed wholly by various color processes, others with aquarelle colors partly printed and partly applied by hand. Specially made paper. Simple, bold typography. Text by Carlos Fischer.

1923 Helleu and Sergent issue Colette, Le Voyage Egoïste. Type, a delicately cut Roman of "copper-plate" character. Illustrated by Charles Guérin with original lithographs. An achievement in the difficult task of making lithography harmonize with the typographic quality of a

book. The copies in complete colors, printed with collaboration of the artist, are scarce.

1923 René Kieffer, Paris, publishes Alfred de Vigny, La Frégate "La Sérieuse." Illustrated with woodcuts by Pierre Falké, colored by hand. Initials in red. Printed by Ducros, Lefèvre et Colas. Paper covers. Limited to 1100 copies.

1923 Gabriel Belot, using wood-engraving to obtain reproduction of pen drawings in thick line, illustrates Balzac, Le Curé de Tours.

1923 Helleu and Sergent issue Poe, Eurêka. Type, a tall Roman of sculptural quality. Illustrated by Alfred Latour, with woodcuts engraved by him. Unusual designs, expressing his view of the book-illustration as ornament related to and not dominating the typography.

1924 Société Anonyme des Editions "Sonor" in Geneva, directed by Auguste Jordanis, prints editions of which Les Idylles de Gessner is example. Ornamented with engravings on wood by P. E. Vibert, printed in tints.

1924 Tolmer, Paris, publishes Grosses Bêtes et Petites Bêtes, a folio picture book of beasts. Illustrations and lettering of text by André Hellé. Colored by hand.

1924 François Bernouard issues Vaillat, Rythme de l'Architecture. Illustrated with crayon drawings in the ornamental manner by Louis Süe.

1924 Librairie Garnier, Paris, publishes Films, a picture book by André Hellé. Colored by hand.

1924 Carlos Schwabe, a Swiss painter and artist of the symbolist school, illustrates Maeterlinck, Pelléas et Mélisande with rich decorative illustrative designs in water color. One of the modern workers in French book art, with many other books to his credit. Published by Henri Piazza.

1924 Léon Pichon issues Toulet, Mon Amie Nane. Graceful Roman of Elzevir character. Illustrated with woodcuts printed in two colors from illustrations by Carlègle. Dainty line work combining the illustrative and the decorative, with wood-block, type and colors in harmony.

1924 A. E. Marty revives the classic outline illustration of decorative character by etching on copper in delicate line and reserved use of masses, the pictorial decoration for Régnier, Scènes Mythologiques.

A CHRONOLOGY OF PRINTING

XIX AND XX CENTURIES

THE MODERN PERIOD IN GERMANY

1892-1894 Most German authorities place beginning of new era of book art about this date, and agree that, as in England, it follows work of William Morris.

1892-1903 Karl Burger, under commission of Prussian State Government, compiles his MONUMENTA GERMANIAE ET ITALIAE TYPOGRAPHICA, a work showing German and Italian incunabula in facsimile reproductions. One of the important source books for typographical study. Printed and published by Reichsdruckerei (the government press), Berlin. See index to chronology, Incunabula.

1895 Otto Julius Bierbaum, writer and poet, publishes PAN, a periodical which is historic for the development of the new art of the book. Printed by W. Drugulin, Leipzig. Ornamented by Klinger, Greiner, Thoma, Sattler, Fidus, Pankok, Eckmann, Heine, E. R. Weiss, and other artists of the new school of the book as unity.

1896 In Munich are founded the periodicals JUGEND (by Georg Hirth) and SIMPLICISSIMUS (by Albert Langen and Th. Th. Heine). Two great forces for new movements in Germany.

1896 Eugen Diederichs, Jena, founds his publishing house. Entrusts design and decoration of books to young artists like Cissarz, Vogeler, Lechter, Behrens, Weiss, Ehmcke, Fidus and others. Uses many printers—Drugulin, von Holten, Breitkopf and Härtel, Poeschel and Trepte, Steglitzer Werkstatt, etc.

1897-1901 Joseph Sattler of Strassburg, designs and ornaments GESCHICHTE DER RHEINISCHEN STÄDTEKULTUR. Chapter headings, vignettes, initials and tail-pieces in manner of ancient German wood-engravers. Type, Fraktur. 4 volumes. Published by J. A. Stargardt, Berlin.

1898-1904 Reichsdruckerei, Berlin, issues DIE NIBELUNGEN. Type, Uncial with pronounced Gothic characteristics, designed by Joseph Sattler, related to manuscript hands of the early Middle Ages. Initials, ornament, illustration and binding by Sattler. Full-page illustrations in woodcuts extremely decorative in conception. Folio. Printed in black, red and gray. One of the famous modern German books.

1898 Eugen Diederichs Verlag, Jena, publishes Maeterlinck, Der Schatz der Armen. Roman type. Arrangement, illustration and decoration by Melchior Lechter. Illustrations on wood-block, powerful outline on black ground. Woodcut initials white on black. Printed by Otto von Holten, Berlin. Considered Lechter's finest work and one of the best German books.

1898 Heinrich Vogeler illustrates and decorates Jacobsen, Frau Maria Grubbe for Eugen Diederichs. So successful that complete edition of Jacobsen follows. Vellum bindings decorated by Vogeler.

1899 Melchior Lechter decorates Stefan George, Teppich des Lebens. One of Lechter's "splendid works." Large quarto. Printed on gray hand-made paper in rich blue and red. Bound in light green linen stamped in blue. Poems on facing pages bound together with one ornamental border. Printed by Otto von Holten under Lechter's direction.

1899 The writers Bierbaum, Heymel and Schröder found Die Insel, a literary periodical which like Pan becomes a powerful factor for the Morris principle of unity in the book. Printed by Drugulin. Decorated by Vogeler, Weiss, Heine, Lemmen and many others. Lasts three years and is foundation for the great book publishing institution Insel-Verlag.

1899 Gesellschaft der Deutschen Bibliophilen founded.

1899 Emil Rudolf Weiss arranges and decorates Bierbaum, Gugeline; and Heymel, Fischer, for Insel-Verlag.

1900 Issue of Eckmann type (Otto Eckmann) and early Behrens type (Professor Peter Behrens), designed under encouragement of Dr. Karl Klingspor. Generally considered to mark beginning of modern German activity in typographical design.

1900 Steglitzer Werkstatt (Steglitz Workshop) established for fine typographical work, by Georg Belwe, type-designer and artist; Professor F. H. Ehmcke, artist, architect and author, and after 1913 instructor graphic arts, Polytechnical School, Munich; and Professor F. W. Kleukens, after 1906 artistic director of Ernst Ludwig Presse, Darmstadt.

1900 Eugène Grasset designs for Genzsch and Heyse his Grasset-Antiqua and Grasset-Kursiv.

1900 Professor Johann Vincenz Cissarz, Dresden, painter and etcher, is entrusted with artistic arrangement of official catalogue, German

Typographical Section, Paris Universal Exhibition. Later joins Royal School of Applied Art, Stuttgart. Produces many bindings and binding cases, and otherwise contributes to art of the book.

1900 Gutenberg Museum founded in Mainz. Opened 1901.

1901 Johann Vincenz Cissarz decorates UNTERSTROM, poems by Helene Voigt-Diederichs. Type, a modernized Gothic. Floral border in antique manner in woodcut for each page. Woodcut decorative illustrations as tail-pieces for each page. Printed in green and yellow-brown by W. Drugulin, Leipzig. Issued by Eugen Diederichs Verlag, Jena.

1901-1914 Professor Peter Behrens, painter, architect, decorator of books, designs Behrens-Schrift (1901), Behrens-Antiqua (1908), Behrens-Kursiv (1908), Behrens-Mediaeval (1914). Issued by Klingspor Brothers, Offenbach.

1902 W. Drugulin, Leipzig, prints and publishes a vast volume: MARKSTEINE. Pages of extracts from all literatures of the world, printed in their types, ranging from German and English to Chinese, Coptic, Malaysian, Sanskrit, Cuneiform and other ancient and extinct languages. Edited and compiled by Johannes Baensch-Drugulin with assistance of scholars of all nations. Elaborately ornamented. Coloring, decoration and arrangement of pages by Ludwig Sütterlin. Designed as memento of five hundredth anniversary of Gutenberg's birth. Limited to 393 copies.

1902 Professor Otto Hupp, designer of famous MÜNCHENER KALENDAR series (see 1885), arranges, illustrates, decorates and designs end-papers and binding for LIEDER FÜR DEN KINDERGOTTESDIENST, published for Alsace-Lorraine by the Strassburg Pastoral Konferenz. Printed by Ph. von Zabern, Mainz, in black and red. Gothic type designed by Hupp. One of the fine song books of the modern era.

1902 Gesellschaft der Bibliophilen issues Kautzsch, DIE DEUTSCHE BUCHKUNST. Type, Gothic Behrens-Schrift. Printed by Poeschel and Trepte, Leipzig.

1904 Insel-Verlag, Leipzig, publishes DIE JUDENBUCHE. Type, Fraktur. Decorated by Walter Tiemann. Printed in black and red.

1904 Karl W. Hiersemann, Leipzig, issues Konrad Haebler, BIBLIOGRAFIA IBÉRICA DEL SIGLO XV (incunabula of Spain). Large octavo, 385 pages.

Part II, 258 pages, published 1917. The authoritative work on Spanish printing. See index to chronology, Incunabula.

1904 To produce an absolutely complete and definite catalogue of all incunabula, the Board of Education, Prussia, constitutes a commission (Kommission für Gesamtkatalog der Wiegendrucke), Konrad Haebler, president. Between 1906-1911 all incunabula in the German public libraries are listed, and with aid of foreign scholars and governments, inventories are made of incunabula in all the countries of the world. See 1919, 1925. See also index to chronology, Incunabula.

1905 Konrad Haebler, Halle, compiles his TYPENREPERTORIUM DER WIEGENDRUCKE. An analysis of incunabula types, under a system which creates fundamental reference material. Rounds out Proctor's work (see 1898, Modern Period in England) and ingeniously identifies the various type forms. Basic type forms grouped to show their derivation from original presses. Type forms of incunabula grouped according to countries, cities and presses. A vastly important contribution to the knowledge of early printing, which has made possible the identification of many books and printers. See index to chronology, Incunabula.

1905 Insel-Verlag, Leipzig, publishes Merimée, TAMANGO. Illustrated with eight etchings by Karl Miersch. Produced by Staatliche Akademie für graphische Künste und Buchgewerbe, Leipzig.

1905 Professor Henry Wieynk, Dresden, designs Trianon type-face. Issued by Bauer, Frankfort. An Italic, which like his Wieynk-Kursiv, has flowing handwriting character. Rococo spirit in modern version.

1906 Heinz König designs König type, a face in which effort has been to combine richness and decorative character of old Germanic Fraktur with clarity. Issued by Emil Gursch, Berlin.

1906 Professor F. W. Kleukens founds in Darmstadt, in combination with Grand Duke Ernst Ludwig of Hesse, the Ernst Ludwig Presse, privately endowed by the Grand Duke. Issues sumptuous editions of classical and modern works and a great mass of smaller examples of fine printing ranging from menus and cards to books. Insel-Verlag acts as publisher.

1906 Eugen Diederichs Verlag, Jena, publishes LEONARDO DA VINCI. Printed in black and red by Breitkopf and Härtel.

1907 Janus-Presse, Leipzig, founded by Carl Ernst Poeschel and Walter Tiemann, a private press conducted like the English private presses, prints its first book: Goethe, Römische Elegien. Roman type. Depends entirely on good typographical arrangement. No decoration except a handsome monogram serving as printers' mark. Limited to 150 copies.

1907 Insel-Verlag, Leipzig, issues Hofmannsthal, Der Weisse Fächer. Illustrated with woodcuts by Edward Gordon Craig. Considered one of the good examples of the German illustrated book of this period.

1907 Karl W. Hiersemann, Leipzig, issues Burger, Buchhändleranzeigen des 15. jahrhunderts (book dealers' announcements). Folio, 32 plates.

1907 In Leipzig is published the first of the Veröffentlichungen der Gesellschaft für Typenkunde des 15. jahrhunderts. (The society for study of fifteenth century types.) A monumental undertaking which has resulted in many hundred full-size reproductions of title-pages, texts and analytical tables of incunabula type forms. See index to chronology, Incunabula.

1907-1910 Otto Hupp designs Liturgisch (1907), Hupp-Unziale (1910), Hupp-Fraktur (1911), Hupp-Antiqua (1910). Issued by Klingspor Brothers, Offenbach.

1908 Professor F. W. Kleukens designs Kleukens-Antiqua. Issued by Bauer, Frankfort.

1908-1910 Professor F. H. Ehmcke designs Ehmcke-Antiqua (1908) and Ehmcke-Kursiv (1910). Issued by Flinsch, Frankfort.

1908 Hans von Weber Verlag, Munich, issues Hyperion, a monthly periodical. Roman types. Title-pages designed by Walter Tiemann.

1908 Reichsdruckerei, Berlin, issues a folio Bible under direction of the artist Ludwig Sütterlin. One of the sumptuous modern Bibles, designed in the spirit of the liturgical printing of the early centuries. Type, a "broad" Fraktur designed specially by Georg Schiller for this purpose, set in two columns to page. Printed in black and red. Calligraphic initials, title-pages and headings.

1908 Melchior Lechter designs and ornaments Treuge, Huldigungen. Quarto. Printed by Otto von Holten, Berlin.

1909 Tempel-Verlag founded in Leipzig by S. Fischer, Hans von Weber, Eugen Diederichs, Julius Zeitler and Carl Ernst Poeschel, also

Georg Hartmann. Issues TEMPEL-KLASSIKER under artistic direction of Professor E. R. Weiss, a famous series of wide scope.

1909 Einhorn Presse, founded by Melchior Lechter and Otto von Holten, prints George, DER SIEBENTE RING and Wolters, HERRSCHAFT UND DIENST.

1909-1923 Professor F. W. Kleukens designs Ingeborg-Antiqua (1909), Helga-Antiqua (1912), Kleukens-Fraktur (1910), Gotische-Antiqua (1916), Ratio-Latein (1923). Issued by D. Stempel Schriftgiesserei, Frankfort.

1909-1923 Erich Gruner, designer and painter, designs, ornaments and illustrates, or makes bindings for more than 250 books. Also wins celebrity with book-plates.

1909 Ernst Ludwig Presse, Darmstadt, produces as spring gift issued by Insel-Verlag a small book: Goethe, EIN HYMNUS. Arranged and decorated by Professor F. W. Kleukens. Considered a "typographic jewel" by German critics of the book.

1909-1923 Professor Walter Tiemann, director, Academy of Graphic Arts, Leipzig, designs Tiemann-Mediaeval (1908), Tiemann-Kursiv (1912), Tiemann-Fraktur (1914), Narciss (1914), Tiemann-Antiqua (1923). Issued by Klingspor Brothers, Offenbach.

1910-1922 Rudolf Koch, instructor, Art of Lettering, Polytechnical School, Offenbach, designs types based on handwriting, formed in accordance with historical styles. Deutsche Schrift (1910), Eine Deutsche Schrägschrift (cursive), (1910), Frühling (1914), Maximilian (1917), Koch-Antiqua, Koch-Kursiv (1922). Issued by Klingspor Brothers, Offenbach.

1910 Emil Rudolf Weiss designs Weiss-Fraktur. Issued by Bauer, Frankfort.

1910 Hoffmann Buchdruckerei, Felix Krais, Stuttgart, produces for Deutscher Buchgewerbeverein, Leipzig, DAS MODERNE BUCH. An enormous folio compilation of examples of modern German printing, illustration and decoration. Cover and end-papers by Professor Cissarz. Binding by C. H. Schwabe.

1911 Insel-Verlag, Leipzig, issues first volume of 1001 NACHT, the Arabian Nights edition produced under direction of its manager, Professor Anton Kippenberg, one of the leaders in establishing modern art of

the book in Germany. Conservatively but finely ornamented, with distinguished typographical treatment, and with great regard to unity of type, illustration, ornament, title-pages and covers.

1911-1913 Lucian Bernhard designs Bernhard-Antiqua (1911) and Bernhard-Fraktur (1913). Advertising display types. Issued by Flinsch type-foundry, Frankfort, merged in 1918 with Bauer foundry.

1912-1920 Professor F. H. Ehmcke designs type tending to historic styles, but modernized and marked by personal manner. Ehmcke-Fraktur (1912), Ehmcke-Schwabacher (1914), Ehmcke-Rustika (1914), Ehmcke-Mediaeval (1920). Issued by D. Stempel Schriftgiesserei, Frankfort.

1912 Eugen Diederichs, Jena, publishes Goethe, FAUST, with typographic arrangement by Professor Ehmcke. A book still cited by technical writers as an example of appropriate design.

1912 Jacoby-Boy designs Bravour, advertising display type. Issued by D. Stempel Schriftgiesserei, Frankfort.

1913 Georg Belwe, one of founders of Steglitzer Werkstatt, designs Belwe-Gotisch. Issued by Schelter and Giesecke, Leipzig.

1914 Professor C. O. Czeschka designs Czeschka-Antiqua, a Roman in delicate copper-plate style with spiral flourishes instead of serifs. Issued by Genzsch and Heyse, Hamburg.

1914 Rupprecht-Presse, Munich, founded under direction of Professor F. H. Ehmcke.

1914 International book exposition (Weltausstellung für Buchgewerbe und Graphik) opened in Leipzig. Generally referred to in German technical publications by the short title "Bugra."

1914 Dr. Wilhelm Wiegand forms Bremer Presse, Munich. Produces books usually without decoration, depending on type entirely. As characteristic feature the initials designed by Anna Simons are cited.

1914 Hugo Steiner-Prag, illustrator of books, teacher, Royal Academy of Graphic Arts, Leipzig, designs Steiner-Prag-Fraktur. Issued by Genzsch and Heyse, Hamburg. Also active in creating bindings and other decoration for the book.

1914 Karl W. Hiersemann, Leipzig, issues Burger, DIE DRUCKER UND VERLEGER IN SPANIEN UND PORTUGAL VON 1501-1536. Octavo, 84 pages, 1 plate. See index to chronology, Incunabula.

1915 Georg Belwe designs Belwe-Antiqua and Belwe-Kursiv. Issued by Schelter and Giesecke, Leipzig.

1916 Kurt Wolff Verlag, Munich, issues Meyrink, DER GOLEM. Illustrated with lithographs in black and white by Hugo Steiner-Prag. Printed by Meissner and Buch. In these and succeeding book illustrations Steiner-Prag has worked to give the lithograph a dense, solid color quality to make it part of the typographical picture.

1916 Reichsdruckerei, Berlin, prints Voulliéme, DIE DEUTSCHEN DRUCKER DES FÜNFZEHNTEN JAHRHUNDERTS, issued as text-volume for Burger, MONUMENTA GERMANIAE ET ITALIAE TYPOGRAPHICA. (See 1892-1903.) See also index to chronology, Incunabula.

1916 Emil Hölzl designs Hölzl-Mediaeval, a type with Roman and Gothic characteristics, but with personal style strongly predominant. Issued by D. Stempel Schriftgiesserei, Frankfort.

1918 Marées-Gesellschaft, a society for cultivation of fine printing, issues Goethe, CLAVIGO. Type, large Weiss-Fraktur-Kursiv, a Gothic designed with calligraphic quality of Italic. Typographic ornament by designer of the type. Title-page black and red, with border and other ornament so used as to relate the design to the Goethe period. Text printed in black and red.

1919 Kommission für Gesamtkatalog der Wiegendrucke (see 1904) completes 33,403 descriptions of incunabula—origins, type forms, initial letters, rubrications, woodcuts, printers' marks and catchwords, foliations, signatures, etc. See 1925. See also index to chronology, Incunabula.

1919 Propyläen-Verlag, Berlin, issues Merimée, CARMEN. Illustrated with lithographs in black and white by Hugo Steiner-Prag.

1919 Karl W. Hiersemann, Leipzig, issues Grillparzer, DIE AHNFRAU. Illustrated with crayon lithographs in black and white by Hugo Steiner-Prag. Printed by Meissner and Buch.

1920 Type-foundry of D. Stempel, Frankfort, revives Jansen-Antiqua and Jansen-Kursiv cut in 1670 by A. Jansen, Leipzig.

1920 Initial appearance of Marcus Behmer-Drucke, printed under direction of Marcus Behmer, published by Otto von Holten, Berlin.

1921 Insel-Verlag founds Insel-Presse in Leipzig under direction of Carl Ernst Poeschel.

1921 Propyläen-Verlag, Berlin, issues Heine, SPANISCHE ROMANZEN. Type, an open, not over-decorated Fraktur. Illustrated with etchings by Hugo Steiner-Prag.

1921 Marées-Gesellschaft, as part of its publication of limited editions with special reference to elevation of graphic arts, issues a Greek edition of SAPPHO, the letters being etched by Emil Rudolf Weiss in the form of delicate and highly ornamental Greek script.

1921 Ratio-Presse, Darmstadt, issues Goethe, DER NEUE PAUSIAS. Type, Kleukens-Antiqua, a "slender" Roman of delicate lines.

1922 Type-foundry of H. Berthold, Berlin, revives the Walbaum types.

1923 Schriftgiesserei Stempel, Frankfort, prints privately Eyth, POESIE UND TECHNIK. Type, Ratio-Latein, a delicate Roman, designed by Professor F. W. Kleukens. Title-page and vignette designed by him, vignette engraved on wood by Oskar Bangemann. Initials, large outline Roman with floral decoration for background.

1923 Rudolf Koch designs Deutsche Anzeigenschrift, advertising display type. Issued by D. Stempel Schriftgiesserei, Frankfort.

1923-1924 Der Deutsche Meisterbund, Munich, formed to give appropriate book-expression to German classics, issues the latest of the series which bears the general title DIE BÜCHER DER DEUTSCHEN MEISTER. Designed under direction of F. H. Ehmcke, with type, ornament, end-papers and cover-design selected in relation to the author's style, subject and period.

1923-1924 Tempel-Verlag, Leipzig, issues Shakespeare, RICHARD III, further volume of the Shakespeare series in two languages. Designed in the style of the other editions in this German series of TEMPEL-KLASSIKER.

1923-1924 Wilhelm Gerstung, Offenbach, prints KÖNIG SINDBAD UND SEIN FALKE. A story from the Arabian Nights, with text designed by Rudolf Koch and engraved on wood by Gustav Eichenauer. Illustrated with five woodcuts by Walter Klemm. DAS HILDEBRANDSLIED, designed as block-book with wood-engraving by Willy Harwerth.

1923-1924 Euphorion-Verlag, Berlin, publishes Pierre Louys, LIEDER DER BILITIS, type Koch-Antiqua, printed by Otto von Holten; Novalis, MÄRCHEN, type Unger-Fraktur, printed by Poeschel; DAS HOHE LIED, text engraved on wood in nine plates by Johannes Tzschichold, illustrated with seven etchings by Willy Jaeckel, printed by Poeschel; Virgil,

Bukolika, illustrations by Richard Seewald engraved on wood; Mörike, Märchen vom Sicheren Mann, type Schwabacher. The two last named produced by Staatliche Akademie für Graphische Künste und Buchgewerbe, Leipzig.

1923-1924 Der Bund der Bucheinbandkünstler, an association of artists in bookbinding, issues Meister der Einbandkunst, an elaborate work designed to maintain and elevate craft-quality.

1923-1924 Karl W. Hiersemann, Leipzig, publishes Buch und Bucheinband, an illustrated retrospect by Hans Loubier, Librarian of the Berlin Kunstgewerbemuseum, and one of the effective workers for good book art.

1923-1924 Buchenau and Reichert Verlag, Munich, publish Die Deutschen Pressen. Special issue of the periodical Bücherstube, giving an account of contemporaneous German book printing establishments which do notable work for the art of the book.

1923-1924 Offenbacher Werkstätten, Offenbach, print their first work (publisher, Verlag Wilhelm Gerstung), Das Zeichenbuch. Under direction of Rudolf Koch, 265 woodcuts of symbols and emblems of trades and professions.

1923-1924 Karl W. Hiersemann, Leipzig, publishes Alte und Neue Alphabete. A rearrangement of Lewis F. Day's original English work by Professor Hermann Delitsch.

1923-1924 Richard Weissbach, Heidelberg, issues Die Unger-Fraktur. The first of a series by G. A. E. Bogeng on famous type-faces. A detailed history of the work of Johann Friedrich Unger, one of the great type-designers of the past, whose faces remain in use.

1923-1924 Hyperion-Verlag, Munich, publishes Rokoko und Empire, covering the art styles of 1700 to 1830. The eighth and final volume of a history of the development of styles in art, treating of the plastic arts, painting, ornamental design and related spiritual arts such as poetry.

1923-1924 Karl W. Hiersemann, Leipzig, publishes Volkmann, Bilderschriften der Renaissance. A work with 110 illustrations analyzing and describing the symbolical values with which the illustrators of the fifteenth and sixteenth centuries endeavored to express spiritual significances. The studies range from the illustrations in the Aldus Hypnerotomachia to printers' marks and ornament.

1923-1924 Fritz Heyder, Berlin-Zehlendorf, publishes ALTDEUTSCHE HOLZSCHNITTKUNST, a collection of the best ancient woodcuts, selected and discussed by Willy Kurth. Roland-Verlag, Munich, publishes DER RITTER VOM TURN, reproducing the woodcuts in the book issued 1493 by Michael Furtner, Basle. Dr. Benno Filser Verlag, Augsburg, publishes reproduction of CALIXT UND MELIBEA printed in 1520 by Grimm and Wirsung, Augsburg, with woodcuts by H. W., supposed to have been Hans Weidlitz. The same house reproduces ARS MEMORATIVA, a "memory-primer" printed *circa* 1490 by Anton Sorg, Augsburg, with 65 woodcuts by an unknown master. Gustav Mori, Frankfort, issues DIE SCHRIFTGIESSER BARTHOLOMÄUS VOSKENS IN HAMBURG UND REINHARD VOSKENS IN FRANKFURT A. M. Insel-Verlag, Leipzig, issues DAS PASSIONAL, reproduced from sixteenth century print with the old woodcuts.

1924 Der Deutsche Buchgewerbeverein, with co-operation of Staatliche Akademie für Graphische Künste und Buchgewerbe zu Leipzig, issues FÜHRER DER DEUTSCHEN BUCHKUNST. A résumé of contemporary German book art by Professor Julius Zeitler, Rudolf Koch, Franz Servaes, Emil Preetorius, Max Leon Flemming, Dr. Alfred Heller, Reinhold Bauer, H. Nitz and Dr. R. Rübencamp. Illustrated with reproduced title-pages, texts, book-illustrations and decorations, book-cover designs, etc. Published by Archiv für Buchgewerbe und Gebrauchsgraphik. Artistic and typographical arrangement by Professor Georg Alexander Mathey. Type, Härtel-Antiqua. Printed by Breitkopf and Härtel, Leipzig.

1924 Kistner and Siegel, Leipzig, issue Nietzsche, MUSIKALISCHE WERKE, volume one of a complete Nietzsche edition produced for the Nietzsche-Archiv. Quarto. Title-page, red and black, with vignette in red. Type, Tiemann-Antiqua (Roman).

1924 Jacques Rosenthal, Munich, issues Haebler, DIE DEUTSCHEN BUCHDRUCKER DES XV JAHRHUNDERTS IM AUSLANDE. Printed by Knorr and Hirth. Collotypes by Albin Graemer. See index to chronology, Incunabula.

1925 Kommission für Gesamtkatalog der Wiegendrucke (see 1904, 1919), Professor Erich von Rath, University Library, Bonn, chairman, Dr. Ernst Crous, Prussian State Library, secretary, announces completion of first volume of catalogue, and states that of about 40,000 different

incunabula, 37,639 descriptions are completed, and that full catalogue will amount to 12 volumes and will require about 10 years for completion. First volume, full quarto, 12⅛ x 9¾ inches, contains descriptions of 3645 prints. Origin, type forms, initials, rubrications, woodcuts, printers' catchwords, signatures, foliations, etc., biographical reference to authors, editors and correctors, with present owners of all known examples. See index to chronology, Incunabula.

A CHRONOLOGY OF PRINTING

XIX AND XX CENTURIES

THE MODERN PERIOD IN AMERICA, ARRANGED BY YEAR OF BIRTH

De Vinne, Theodore Low—Printer, author, typographer. Born, December 25, 1828, at Stamford, Connecticut. Died, February 16, 1914. 1842, apprentice Newburgh, New York, GAZETTE. 1850, entered printing-house of Francis Hart and became foreman. 1858, junior partner of Francis Hart. 1865, organized New York Typothetæ and was first secretary. Studied French, German and Italian for specific purpose of making himself proficient printer. 1859, began writing and continued more than 55 years. More than 100 titles, including, 1864, THE PROFITS OF BOOK COMPOSITION; 1869, THE PRINTERS' PRICE LIST; 1872, THE STATE OF THE TRADE; 1876, THE INVENTION OF PRINTING, with a second edition in 1878, also issued by George Bruce's Son and Company, type-founders, set in various types, and forming part of their specimen books, 1878 and 1882; 1888, CHRISTOPHER PLANTIN AND THE PLANTIN-MORETUS MUSEUM AT ANTWERP; 1900, THE PRACTICE OF TYPOGRAPHY, now issued in four volumes: PLAIN PRINTING TYPES, MODERN BOOK COMPOSITION, TITLE-PAGES, and CORRECT COMPOSITION—the series being completed when he was more than 70 years old; 1910, NOTABLE PRINTERS OF ITALY DURING THE FIFTEENTH CENTURY. Trade publications from 1859 to 1911 contain essays and discussions by De Vinne covering many subjects varying from historic backgrounds to the newest technical tendencies. 1872, contracted with Scribner's to print ST. NICHOLAS. 1876, contracted to print SCRIBNER'S MONTHLY. Began printing in days of the woodcut. Active in development of half-tone printing, and a pioneer in use of coated paper. Designed many type-faces. One of the founders of The Grolier Club and printed many of its publications.

Nelson, Robert Wickham—Type-founder. Born, September 20, 1851, Granville, New York. In last 30 years, as president, has made American Type Founders Company a great force in American typography. Undertaking its management in a period when typographical taste was at low ebb, with methods and output of type-foundries disorganized, he was one of the first to perceive that the industry needed primarily to be put back on its basis as an art; and commencing 1894, when he undertook leadership, the organization under him has worked in that direction. After early commercial experience, bought and conducted small weekly newspaper, THE PHOENIX, Braidwood, Illinois.

Formed partnership as Nelson, Ferriss & Company and established Joliet (Illinois) Daily News (later consolidated with Joliet Republican and now the Herald-News). 1881, established Nelson's Ready-print in Chicago, serving small newspapers. Subsequently formed partnership with O. J. Smith, then proprietor of Chicago Express, and with G. W. Cummings, to supply publishers of weekly and small daily newspapers with stereotype plates. Device for making base and plates type-high patented by Nelson. Enterprise operated under name of American Press Association, and greatly successful. 1886, became interested in Thorne type-setting machine, developed it and marketed 2000 machines.

Dodge, Philip Tell—Lawyer, inventor, industrial leader. Born, Fond du Lac, Wisconsin, 1851. 1891, after previous association as patent lawyer and adviser, became chief of group working on a type-setting machine. His broad vision of business perceived the requirements of the art, and anticipated many of its developments. Under his direction, maintained for more than 30 years, the machine attained its success. Has made more than one hundred inventions for the linotype. Invented and patented roller keyboard which greatly increased speed and accuracy of the machine. Invented and patented two-letter matrices, which enabled machine to carry italics and small capitals. Invented and patented use of two or more magazines. During past three decades made the organization a helpful factor in education of apprentices, typographical improvement and other printing progress. 1914, called Edward Everett Bartlett as typographical adviser and director for the Linotype Company. President, Mergenthaler Linotype Company. Chairman, Linotype and Machinery, London, England. President, 1913-1924, International Paper Company. Director, many other companies. Graduate, Columbia University, Law School, Washington, D. C. Patent lawyer for many years. Many inventions in firearms, photography, etc.

French, George—Lecturer and writer on the graphic arts. Born, North Clarendon, Vermont, 1853. 1903, established Imperial Press, Cleveland, Ohio. Author, Printing in Relation to Graphic Art and Art and Practice of Advertising. His contributions to literature of typography have had wide circulation and have had beneficial influence on typography.

Mergenthaler, Ottmar—Inventor and watchmaker. Born, May 10, 1854, Hachtel, Württemberg, Germany. Apprenticed as watchmaker and became expert. 1872, arrived in America and began work for a relative, August Hahl, Washington, D. C., maker of electrical appliances. Made many instruments for United States Signal Service. 1873, shop removed to Baltimore, Maryland. 1876,

group working on various inventions for type-setting by machine, engaged him on wages and provided cost of shop and materials. 1876–1884, a period of progressive invention by Mergenthaler and associates, during which many machines were built on various principles and discarded. 1886, the first commercially successful linotype produced. 1886, NEW YORK TRIBUNE issues first newspaper in the world to be set by linotype. CHICAGO DAILY NEWS and LOUISVILLE COURIER-JOURNAL (with NEW YORK TRIBUNE) first linotype-equipped newspapers. 1890, *circa*, to 1898, ill health compels Mergenthaler to become less active and he finally retires. 1899, dies in Baltimore, Maryland, October 28, leaving a fortune as fruit of his work.

Heintzemann, Carl H.—Printer, artist, musician, book-lover. Born, Bad Wildugen, Germany, December 28, 1854. Established The Heintzemann Press in 1879, in Boston. Between 1890 and his death in 1909, stood as one of the forces for the better art of the book in America. Closely associated with Copeland and Day in their work in Boston for giving the public popular and reasonably priced literature with typographical art and quality. Expert in textbook composition and notable among publishers of American school books in English and foreign languages. Equally skilled in commercial work and produced many fine catalogues. Produced many privately printed works, some of which are highly prized today by collectors, also various books of decorative character in sets. One of the founders of Boston Society of Arts and Crafts, and a leading member of that society to his death.

Gilliss, Walter—Printer and author. Born, May 17, 1855, at Lexington, Kentucky. Died, September 24, 1925. Established The Gilliss Press, 1869. A powerful influence for good printing. Noted for good typography and particularly for early fine use of Elzevir and Caslon faces, and Blackletter. Printer of many books for The Grolier Club, also limited editions of William Loring Andrews. Author of THE STORY OF A MOTTO AND MARK and A PRINTER'S SUN-DIAL. Contributed many scholarly articles to trade journals on typography and the history of printing. Member, The Grolier Club. Past-president, American Institute of Graphic Arts. Typographical adviser to The Country Life Press (Doubleday, Page & Company).

Bullen, Henry Lewis—Born, September 18, 1857, in Ballarat, Victoria, Australia, of American parentage. Known widely through contributions to printing craft periodicals on the history, art, literature and technique of typography and its allied arts. Earnest promoter of vocational education of printers' apprentices since 1882; one of the founders of the School for Printers' Apprentices of the City of New York. Founder and curator of the Typographic

Library and Museum of the American Type Founders Company, Jersey City, New Jersey. Member of American Antiquarian Society, (London) Bibliographical Society, American Bibliographical Society, Gutenberg-Gesellschaft (Mainz), Grolier Club, Carteret Book Club, Society of Printers (Boston), and American Institute of Graphic Arts. In 1892 entered employ of American Type Founders Company; created vogue for Caslon Old Style types, and renaissance of early Venetian and French master type-designs, now known as Cloister Old Style and Garamond, with decorative designs of same period. Now devoted to educational work under the auspices of the American Type Founders Company in connection with the Typographic Library of that company.

Updike, Daniel Berkeley—Printer, publisher, author. Born, Providence, Rhode Island, 1860. Founded, in 1893, The Merrymount Press, Boston, Massachusetts. 1895, Bertram Grosvenor Goodhue designed for Mr. Updike the Merrymount type used, in 1896, in THE ALTAR BOOK; containing the Order for the Celebration of the Holy Eucharist according to the Use of the American Church. With illustrations by Robert Anning Bell and type, borders, initials and cover by Bertram Grosvenor Goodhue. Also, in 1904, in the AGRICOLA of Tacitus, in folio, and in a few books for customers. 1898, revived commercial use of Scotch modern-face types—notably in the novels of Edith Wharton, printed for Charles Scribner's Sons. 1904, showed interesting revival of the French Lettre Bâtarde in THE NAME OF THE MERRYMOUNT PRESS. 1904, elected to membership in American Antiquarian Society. 1905, Herbert P. Horne, England, designed for the Press his Montallegro type. This face used first in Condivi's LIFE OF MICHELAGNOLO BUONARROTI, The Merrymount Press; later for The Humanists' Library: Leonardo Da Vinci's THOUGHTS ON ART AND LIFE; Erasmus, AGAINST WAR and other like works. 1910, Honorary Degree, Master of Arts, Brown University. Citation by President Faunce: "Daniel Berkeley Updike, printer and publisher, combining the skill of the craftsman with the insight of the scholar, whose books are an honor to America and a pleasure to other lands." 1911-1916, lecturer, Technique of Printing, Harvard University School of Business Administration. 1912-1914, President of The Society of Printers, Boston. 1915, elected to Board of Management of the John Carter Brown Library, Providence. 1919, first use of Janson's XVII century fonts in this country, in THE MERRYMOUNT PRESS, ITS AIMS, WORK, AND EQUIPMENT. 1922, author of PRINTING TYPES: Their History, Forms, and Use. Published by Harvard University Press, Cambridge, Massachusetts, printed at The Merrymount Press. 2 vols., 308, 328 pages. Illustrated with 367 plates. 1924, first use of Poliphilus and Blado fonts in CITATIONS OF

Honorary Degrees, Brown University, 1900-1904. 1924, author of In the Day's Work, three essays on printing. Published by Harvard University Press, printed at The Merrymount Press. Also edited an annotated reprint of Edward Rowe Mores' A Dissertation upon English Typographical Founders and Founderies, for The Grolier Club, printed at The Merrymount Press.

Bartlett, Edward Everett—Designer, engraver, printer. Born, Brooklyn, New York, 1863. Studied design and drawing under working masters. Gained his early reputation drawing directly on the wood-block. Established his own wood-engraving business, 1880. Originated the "phantom" illustration, drawing on boxwood the first such illustration ever made—a Westinghouse engine—in 1887. Developed the retouching of photographs, his plant serving for many years as the recognized "training school" in this art, and was the first to establish a printing plant combining all branches of the business—design, illustration, engraving, printing and binding—under a single management. 1892, made the first complete dummy of a commercial catalogue, and with his partner, the late Louis H. Orr, became one of the chief influences in improving the standard of commercial printing. Established Department of Linotype Typography for the Mergenthaler Linotype Company in 1914, and in 1915 brought out the Linotype Benedictine face, produced under his direction by Joseph E. Hill. 1919, retained as assistant in research and executive activities, Harry L. Gage, who, in 1913, established the school of printing at Carnegie Institute of Technology, Pittsburgh. 1920, journey of typographic research in Europe for the Linotype Company. 1923, in collaboration with William Dana Orcutt, produced The Manual of Linotype Typography. 1924, 1925, further journeys of typographic research in Europe, visiting chief printing centers of England and the Continent. Art critic. Chairman, Art Committee, The Engineers' Club, New York. Director, The Gutenberg Society, Mainz. Member, The Grolier Club, American Institute of Graphic Arts. President of the Bartlett Orr Press and Director of Typography for the Mergenthaler Linotype Company.

Hildreth, E. L.—Printer. Born, in Chesterfield, New Hampshire, July 25, 1863. Educated in Hinsdale, New Hampshire, public school. 1881, began as apprentice in the printing establishment which now is his. Prefers to refer to his establishment as a "country print-shop," but has recognition in both United States and Europe for the quality of his books. His own estimate of them is: "Not because they are exceptional, but because they are examples of good, straightforward trade editions well done . . . . The books are simply examples of the kind of machine composition that may be achieved if one is insistent and

willing to spend a little more labor and care to produce something very much better, and if publisher and printer co-operate heartily to give the purchaser a thoroughly good product and to earn for themselves a reputation for doing so .... They are made simply with the feeling that composition, paper, press-work, binding should all contribute to the making of an honest, first-class trade edition, and that a book should represent substantial values not merely in contents but in appearance." In 1910, his establishment, E. L. Hildreth and Company, Brattleboro, Vermont, began working for the Yale University Press. First publication, a small book of 48 pages. In 1923, at Boston Graphic Arts Exposition, made an exhibit of Yale University Press publications which attracted general admiration. Among them were How America Went to War, 6 volumes; Terrestrial and Celestial Globes; The Journal of a Lady of Quality, and many others ranging from science to poetry. Besides printing for Yale University Press, prints for The Association Press, Mount Herman and Northfield schools, Middlebury College and similar institutions.

Goudy, Frederic William—Designer, printer, author and lecturer. Born, Bloomington, Illinois, 1865. Made five journeys for study in England, Belgium, Holland and France. Began business life as an accountant. Engaged in designing since 1898. Proprietor, Village Press. President, Village Letter Foundry. Instructor, Art Students' League, New York, Clarence H. White School of Photography, New York. Art Director, Lanston Monotype Company, Philadelphia. 1904, bronze medal for book printing, St. Louis Exposition. Gold medal, American Institute of Graphic Arts. President, Boston Society of Printers. Author, 1918, The Alphabet; 1922, Elements of Lettering. Editor, Ars Typographica (quarterly). Lecturer and contributor to many periodicals on typography and allied arts. Has designed more than 40 type-faces, among them Kennerley, Forum, Goudy Antique, Goudy Old Style, Goudy Modern, and Hadriano.

Munder, Norman T. A.—Printer and lecturer. Born, Baltimore, Maryland, 1867. Apprenticed in early youth. Specializes in printing of half-tone and color-plates. Producer of books in collaboration with T. M. Cleland, Bruce Rogers, Frederic W. Goudy and others. Gold medal for exhibition of printing, San Francisco Exposition. Bronze medal, books, American Institute of Graphic Arts, New York. Vice-president, American Institute of Graphic Arts.

Johnson, Henry Lewis—Editor and author. Born, Limington, Maine, 1867. 1903, began publication of The Printing Art. 1910, established The Graphic Arts. Consistent advocate of quality in printing. His efforts for better typography have had much to do with the tendency to simplicity now evident in business printing.

Carr, Horace—Printer and lecturer. Born, Crawford County, Pennsylvania, 1868. Founded Printing Press in Cleveland, 1906. Printer of books for Rowfant Club and other institutions. Student of type-design and owner of large collection of special and imported types and borders. Work noted for brilliancy of presswork and taste in paper selection and typography. His skillful use of Caslon has aided in demonstrating the value of this type-face.

Bradley, "Will"—Artist, designer, printer, author. Born, Boston, 1868. Apprentice, journeyman and foreman in a country print-shop. 1893-1894, won his first reputation by designs for posters, book-covers, etc., in Chicago. 1894-1895, started Wayside Press in Springfield, Massachusetts, after studies in art to develop talent for drawing and design. Series of booklets, unique in plan and style, vigorously individual, brought favorable comment during succeeding years. Had fortune of impressing not only printers, but the non-technical public. Published BRADLEY, HIS BOOK. Favorite method, highly decorated type-page. Works in black and white and color, his color combinations being unusual. Highly successful in adapting styles of past periods both in typography and illustration. Fond of seventeenth and eighteenth centuries. Has eminent versatility. Besides bold, forcible style used for his woodcut effects, handles detail with extraordinary delicacy of line and design. His book ornaments in latter manner so elaborate and rich in detail that it was customary at one time to compare him with Aubrey Beardsley. In 1905, did important work for American Type Founders Company. Has also designed furniture and houses.

Goodhue, Bertram Grosvenor—Architect, artist, type-designer, decorator of books, craftsman. Born, Pomfret, Connecticut, 1869. Distinguished in each of the related arts. A leader in early '90's of groups laboring in America to spread lesson of Kelmscott Press. Specialized in Gothic design, letter styles and ornament. Authority on Gothic manuscript and early printed books. 1892, published KNIGHT ERRANT, a random piece, and notable bit of book-making. Also MAHOGANY TREE. Designed many book-plates. Influenced various publishers, particularly Copeland and Day. For their ESTHER: A YOUNG MAN'S TRAGEDY, produced pages in Morris manner—rich medieval border with recurrent heavy unit to create "Blackletter" feeling, and with initials powerfully black. Ability in non-Gothic design exhibited in such books as SONGS OF HEREDIA, published by Small, Maynard & Company, initials and borders in delicate "copper-plate" manner of late eighteenth century furor for the antique. "His drawings were marvellously executed, often in exact size; the lettering, sometimes in a distinguished and masterful Roman, more often in a very beautiful Blackletter, alone was enough to give a high place." (Ingalls Kimball, in memorial article.)

1895 (*circa*), designed for The Merrymount Press (D. B. Updike) the Merrymount type. Based on Jenson letter, with more weight of line, and avoiding blackness of Morris letters. Shown in THE ALTAR BOOK, 1896, folio, which shows also his initials and borders. White, floriated, on solid black ground, with skillful treatment of masses. It has been said that "no finer design in the Gothic manner has been wrought in America." With Ingalls Kimball, designed Cheltenham type, which has become an "international type," being part of equipment of every nation in the world. In years preceding his death (April 23, 1924), almost wholly occupied with architecture. Work includes churches of St. Thomas and St. Vincent-Ferrer in city of New York, State Capitol, Lincoln, Nebraska (not erected at time of his death), and Gothic Chapel for Military Academy of the United States at West Point, New York (Cram, Goodhue and Ferguson, architects).

Rogers, Bruce—Artist, printer, type-designer, editor. Born, Lafayette, Indiana, May 14, 1870. 1890, graduated, B.A., from Purdue University. 1891-1894, newspaper artist (INDIANAPOLIS NEWS); designer for illustrating company, and on his own account. 1894-1895, removed to Boston, Massachusetts, and worked with L. Prang & Company. 1895-1912, with Riverside Press, Cambridge, Massachusetts, as creator of fine printing and designer of limited editions. 1900, began Riverside Press editions. 1901, Montaigne type, a revival of sixteenth century Venetian, designed by him, cut for Riverside Press edition of ESSAYS OF MONTAIGNE, published 1903; frontispiece and title-page borders designed by him; headbands and large initials, white on black ground in the manner of Geofroy Tory. 1901, De Maistre, VOYAGE AUTOUR DE MA CHAMBRE, Caslon type, ornamental initials. 1902, Raleigh, THE LAST FIGHT OF THE REVENGE, Howard Pyle illustrations in woodcuts. 1903, Ronsard, SONGS AND SONNETS, arabesque title-border in Lyons manner, contemporaneous with the poet. 1903, FIFTEEN SONNETS OF PETRARCH, Italic lowercase and Roman capitals in Aldine manner. 1906, SONG OF ROLAND, in Lettre Bâtarde (French Gothic), marginal notes in Civilité type. 1906, Saint-Pierre, PAUL ET VIRGINIE, in Didot type, arranged in French style. 1911, ECCLESIASTES, woodcut borders, borders and other ornament designed in manner of Geofroy Tory. 1913-1916, independent designer and printer in New York, assisting Museum press of Metropolitan Museum of Art. 1916, designed Centaur type which he describes as a refinement on his Montaigne design. Used since 1914 for publications of Metropolitan Museum of Art. Complete font, 14 point, shown in THE CENTAUR, translated from the French of Maurice de Guérin by George B. Ives. 1917, joined Emery Walker (associate of William Morris and until 1909 partner with T. J. Cobden-Sanderson in the Doves Press, Hammersmith,

London, England). Centaur types used for Dürer, On the Just Shaping of Letters (The Mall Press, Hammersmith, 1917). October, 1917-August, 1919, Printing Adviser, Cambridge University Press, Cambridge, England. September, 1919, appointed to his present office of Printing Adviser to Harvard University Press, Cambridge, Massachusetts. 1920, joined printing-house of William Rudge, Mount Vernon, New York. Recent typographical productions. 1920, Moore, A Visit from St. Nicholas, type, Original Old Style, color woodcuts from illustrations by Florence W. Ivins. 1920, The Journal of Madam Knight, eighteenth century style decoration. 1921, Thoreau, Night and Moonlight, revival of sixteenth century style. 1924, Announcement, in type of John Baskerville.

Orcutt, William Dana—Author, printer. Born, West Lebanon, New Hampshire, April 18, 1870. Lecturer and writer on the higher phases of printing as an art and many works of fiction. Decorated by the Italian Government "for interpreting Italy to America in the sister arts of literature and printing." Author of: Writer's Desk Book, 1912; Author's Desk Book, 1914. 1923, in collaboration with Edward Everett Bartlett, produced The Manual of Linotype Typography. Designer and producer of the Humanistic type. Associated with Plimpton Press, Norwood, Massachusetts.

Garnett, Porter—Designer, printer, author, teacher. Born, San Francisco, California, March 12, 1871. In 1895-1896 produced with Gelett Burgess The Lark and Seen and Unseen using the original Caslon Old Face. Designed many books for California publishers. In 1922 instituted course in Fine Printing at Carnegie Institute of Technology, where, in 1923, he established The Laboratory Press to issue broadsides, leaflets and books, the work of his students—the first private press devoted solely to educational ends. Chevalier of the Legion of Honor; vice-president, American Institute of Graphic Arts, 1924-1925; member, The Grolier Club, New York.

Nash, John Henry—Printer, publisher. Born, Woodbridge, Ontario, 1871. 1887, apprentice, Toronto, Canada. 1894, worked in Denver, Colorado. Three years as publisher of books in New York City. 1916, established press at San Francisco. 1923, Honorary Degree, Master of Arts, Mills College, California; citation by President Aurelia Henry Reinhardt: "John Henry Nash, printer and book-maker, collector of rare volumes; follower in the steps of Gutenberg and Caxton; founder of a press in San Francisco, as famous in London as are the presses of Morris and Cobden-Sanderson in our western land; establisher upon the Pacific Coast of that art without which education in a democracy would be impossible and which preserves the best of human thought in forms

of imperishable beauty." Collector of rare books and books on printing, selected after study in Europe; examples from Gutenberg and Jenson's work to that of Morris and Cobden-Sanderson. Among other books has printed: QUATTROCENTISTERIA, for The Grolier Club; SILVERADO SQUATTERS, for Charles Scribner's Sons, illustrated; SOME LETTERS FROM ALFRED DOUGLAS TO OSCAR WILDE, containing 26 facsimile letters; RUTH ST. DENIS, PIONEER AND PROPHET, two volumes, illustrated; TAMERLANE AND OTHER POEMS, with facsimile of original; CURIOSITIES OF EARLY ECONOMIC LITERATURE; OLD CALIFORNIA, with ten color plates; AN INTRODUCTION TO MOBY DICK; ADONAIS, with facsimile of original. All limited edition books, on hand-made papers, mostly for private distribution. Many library catalogues for Charles W. and William Andrews Clark, Jr. His custom is to print and distribute among his friends, from time to time, handsome examples of his book-making. Among these are: THE LIFE OF DANTE; ECCLESIASTES, French Lettre Bâtarde (Gothic); THE NEW WORLD; THE LAKE ISLE OF INNISFREE, 8 pages, with facsimile of Yeats' poem, Incunabula; BARNEY MCGEE; THE IDEAL BOOK.

Oswald, John Clyde—Born, Fort Recovery, Ohio, 1872. Began there in printing business, 1885. Removed to New York, 1894. President, Oswald Publishing Company; editor, THE AMERICAN PRINTER, 1897. Ex-president, American Institute of Graphic Arts, New York Typothetæ, National Editorial Association, Federation of Trade Press Associations, New York Trade Press Association (1909-1910). President, International Benjamin Franklin Society; director, Art Alliance; treasurer, National Society for Vocational Education; member, New York State Press Association, Press Club, The Grolier Club, Advertising Club of New York; secretary, National Arts Club. Author, BENJAMIN FRANKLIN, PRINTER.

Gress, Edmund G.—Born, March 29, 1872, in Easton, Pennsylvania. Learned printing trade at Free Press, Easton. Did reporting and wrote special articles. Manager of job department, 1901-1902. 1903, to New York in charge of composing-room of THE AMERICAN PRINTER. 1905, first book: THE AMERICAN MANUAL OF TYPOGRAPHY (wrote 18 of the 24 chapters and planned it). 1908, director and secretary, Oswald Publishing Company. 1914, vice-president. 1915, editor, THE AMERICAN PRINTER. Author of: THE AMERICAN MANUAL OF TYPOGRAPHY (1905), AMERICAN HANDBOOK OF PRINTING (1907), TYPE DESIGNS IN COLOR (1908), ART AND PRACTICE OF TYPOGRAPHY (1910), revised edition of ART AND PRACTICE OF TYPOGRAPHY (1917), A DASH THROUGH EUROPE (1923). Lecturer on typography, general printing, editorial practises, business and craft subjects. Director, American Institute of Graphic Arts.

Rudge, William Edwin—Printer and publisher. Born, Brooklyn, New York, November 23, 1876. Inherited the printing business of his father, in New York City. 1921, removed his plant to Mt. Vernon, New York. His scholarly and careful work in book and commercial printing has commended itself to the conservative book-lover and discriminating user of printed matter. Has achieved reputation for beauty and delicacy of presswork. In association with Bruce Rogers has rendered great service to typography by the high standard set by their work to the whole body of American printers. Vice-president, American Institute of Graphic Arts, member of The Grolier Club. Chairman, Better Printing Committee, United Typothetæ of America. Engaged in publishing as a separate venture in 1922, and has issued a number of books of general interest as well as special monographs on printing and the graphic arts.

Gandy, Lewis C.—Editor and writer. Born, Kansas, 1876. 1910, assumed editorship of THE PRINTING ART on retirement of Henry Lewis Johnson. Author of monographs on Bodoni, Caslon and others. Contributor to trade journals on typographic subjects. Advocate of simplicity in commercial typography.

Seymour, Ralph Fletcher—Designer and printer. Born, Milan, Illinois, 1876. 1905, established The Alderbrink Press, Chicago. Designed private type modeled on Kelmscott "Golden" face in which he printed a number of books for a limited circulation. Instructor in composition and illustration at Art Institute of Chicago.

Marchbanks, Hal—Designer and printer. Born, Ennis, Texas, 1877. Learned to set type in Dallas, Texas, 1898. Moved to Lockport, New York, "on the towpath" and established print-shop in 1900. Came to New York City in 1903 as sales representative for Edward Stern & Company of Philadelphia. Later became manager of job department of Hill Publishing Company which he bought out in 1912, establishing the Marchbanks Press. Founder-member of the American Institute of Graphic Arts. Member of Salmagundi Club. Advocate of simplicity in typography. Publisher (with Frederic W. Goudy) of ARS TYPOGRAPHICA.

Currier, Everett—Printer and writer. Born, January 16, 1877, Yarmouth, Nova Scotia. Won success in decorative composition marked by studious care and fine execution. Author of TYPE SPACING and numerous articles on typographic matters. President, Currier and Harford, Ltd.

Bradley, William Aspenwall—Art director and writer. Born, Hartford, Connecticut, 1878. 1904, in charge of book production McClure Phillips Company, and produced "trade" volumes designed with taste and care. 1916, established manufacturing department of Yale University Press. Noted for contributions to trade journals on better craftsmanship in book-making.

Kennerley, Mitchell—Publisher. Born, August 14, 1878, in Burslem, England. President, Anderson Galleries. One-time owner THE FORUM magazine. Attracted attention as publisher of well-designed and well-printed books. Commissioned Frederic W. Goudy to cut (in 1910) the type-face since known as Kennerley, first use of this type being in the book THE DOOR IN THE WALL, by H. G. Wells, published by Kennerley, 1912. Publisher of two books on type-design and lettering by Goudy: THE ALPHABET and ELEMENTS OF LETTERING. Has been a consistent patron of the graphic arts in promoting and encouraging exhibitions and lectures, and in assistance to individual artists.

Sherbow, Benjamin—Lecturer and teacher. Born, Germany, 1878. 1912, began preparation of a series of charts for the easy determination of typographic essentials, published in 1917. 1915, published MAKING TYPE WORK. 1921, published EFFECTIVE TYPE-USE FOR ADVERTISING. Awarded Higham cup and gold medal for lecture, A.A. of A.A. Convention 1915, on TYPE-USE.

Cleland, Thomas M.—Artist, designer, printer. Born, Brooklyn, New York, August 18, 1880. Says of himself: "Began work as printer in a small shop over a saloon on Eighth Avenue, New York, at the same time making decorative drawings for the work. Learned technical details of type-setting, presswork, etc., from practical experience." In ILLUSTRATED BOOKS OF THE PAST FOUR CENTURIES, New York Public Library, 1920, Frank Weitenkampf, Chief of Arts and Print Division, says: "Men such as William Morris in England, Joseph Sattler in Germany, Bruce Rogers and T. M. Cleland in the United States, representing different national and individual taste and temperament, have in our times clearly brought before us the necessity of considering the relation of the parts of a book to each other, leading to unity in the design of the volume." 1924, Art Museum, Princeton University, exhibiting selected old and modern books, showed as one example THE LOCOMOBILE BOOK, done by him 1915 in Bodoni spirit. His revival of Bodoni face and manner the most noteworthy example of use of this type in our time. See reference to Mr. Cleland's work in Updike's PRINTING TYPES. 1894-1895, brief course of study in antique and life drawing at Artist-Artisans Institute, New York, now out of existence. 1896, began work as printer. Made his own decorative drawings. 1899, set up small press "in the cellar of father's house and did some little books and a few circulars, etc." 1900, removed to Boston. Established Cornhill Press, where, according to him, "three small books were printed in very 'limited edition.' Upon the quite natural death of this enterprise, continued work as a decorative designer." 1902, made type-designs for American Type Founders Company. Several months' travel in Italy. 1907-1908, Art Director, MCCLURE'S MAGAZINE. Returned to work as independent designer. 1912,

again entered field of printing, installing types and presses for production of catalogues and other forms of commercial work from his own designs. 1920, sold printing establishment. Now devotes entire time to decorative design.

Rollins, Carl Purington—Born, West Newbury, Massachusetts, 1880. Educated, Newburyport High School and Harvard College. Honorary Degree of M. A. from Yale University, 1920. Began work with type as a boy. Did first printing ever done in the present Harvard University Press quarters (printed menus for student dining-hall as an undergraduate in 1900). Later worked for Ambrose Brothers on Georgetown (Massachusetts) ADVOCATE as editorial writer, advertisement compositor, gasoline engine starter, mailing clerk and job press feeder. 1900, started work for Heintzemann Press of Boston as compositor in book-room. Contemporary there of A. F. Mackay, J. M. Bowles, Henry Lewis Johnson, etc. 1903, went to Montague, Massachusetts, and for a year and a half operated the New Clairvaux Press with a Golding Jobber and two boys. Spent summer of 1904 in Europe. Chief, Department of Graphic Arts, Jamestown Exposition, Norfolk, Virginia, 1907. From 1909 to 1918, proprietor of the Montague Press (Dyke Mill), Montague, Massachusetts. From 1918 to date connected with Yale University Press, New Haven, Connecticut, and from 1920 to date printer to Yale University, with rank of Assistant Professor. Principal work as a printer: Development of the Montague Press, raising the standard of printing at Yale. Writer of technical papers.

Dwiggins, W. A.—Typographer and illustrator. Born, Martinsville, Ohio, 1880. Student in Frank Holme's School of Illustration, Chicago, 1899-1901. Specialized in applying graphic arts to printed matter, doing work for various large national advertisers in Chicago. 1905, began work in Boston, establishing residence in Hingham. Acting Director for Harvard University Press during C. C. Lane's army service. 1915-1921, with Laurance B. Siegfried published various numbers of THE FABULIST. 1919, published EXTRACTS FROM AN INVESTIGATION INTO THE PHYSICAL PROPERTIES OF BOOKS AS THEY ARE AT PRESENT PUBLISHED, undertaken by "The Society of Calligraphers." Also produced other publications for the same society. "Secretary, Society of Calligraphers." Author of treatise on CASLON'S TYPE FLOWERS, written for Society of Printers, Boston, Massachusetts.

Hunter, Dard—Printer, designer, paper-maker, type-founder. Born, Steubenville, Ohio, 1883. Learned printing from his father who operated a private press in Chillicothe, Ohio, issuing books written by himself. Worked seven years in Roycroft Shops, designing commercial printing and about 50 books. Interest in hand-made papers took him to Europe where he learned the craft. Studied in

Graphische Lehr und Versuchanstalt, Vienna, under Rudolf von Larisch, the type-designer, and also perfected himself in lithography and letter-press printing. After further studies in England, where he did much commercial printing, notably in designing automobile catalogues, established himself in Marlboro-on-the-Hudson, New York, where he made his own paper and types. Finished his first "one-man book" in 1915—Frank Weitenkampf, THE ETCHING OF CONTEMPORARY LIFE, produced for Chicago Society of Etchers. Limited to 200 copies. A copy, with the equipment for making it, deposited in Graphic Arts Division of National Museum, at Washington, D. C. Wrote and printed OLD PAPER MAKING, a book entirely produced by one man from authorship to binding. In 1924-1925, devoted himself to producing a bibliography of paper-making and watermarking from 1390 to 1800, THE LITERATURE OF PAPERMAKING, limited to 170 copies for sale, type designed and cast by him, paper of his own manufacture.

Teague, Walter Dorwin—Born, Decatur, Indiana, 1883. Enrolled, 1903, at Art Students' League, New York, studying under George Bridgman. Associated with Calkins and Holden for four years from 1908, and then began free lancing. Has done work for the Metropolitan Museum of Art and for many national advertisers. President, Artists' Guild, 1923 and 1924. Received Art Directors' Club medal for decorative design in 1922 and 1923. Articles on USE OF ORNAMENT WITH GARAMOND, CASLON AND BODONI TYPES, in December, 1923, January, 1924 and February, 1924 issues of THE AMERICAN PRINTER. Article on THE SPLENDOR OF THE BOOK, in August 5, 1924 Craftsmen Number of THE AMERICAN PRINTER. Has designed a series of type ornaments for American Type Founders Company.

Adler, Elmer—Printer, writer and collector. Born, July 22, 1884, in Rochester, New York. In 1922, he incorporated the Pynson Printers, having previously begun a successful career in manufacturing clothing, during which his enthusiasm as a collector led him to abandon a foreordained business to produce fine books. Associating notable designers and typographers with his work, Mr. Adler has made a number of books whose typographic excellence has attracted wide notice. His comprehensive typographic library has been made available to the public. In 1925 the five books which he submitted were selected among the fifty books of the year for a current exhibition. He is a writer and speaker on typography, and is active in promoting its influence on public taste.

McMurtrie, Douglas C.—Printer and author. Born, July 20, 1888, in Belmar, New Jersey. 1916-1918, printer to Columbia University. 1919, built plant in

Greenwich, Connecticut, now the Condé Nast Press. 1924, established in New York a plant under name of Douglas C. McMurtrie, Inc. 1925, Editor of Ars Typographica. Author of American Type Design, Plantin's Index Characterum of 1567, The Corrector of the Press in the Early Days of Printing, and other books on the history of typography, in addition to numerous contributions to American and European journals on type-founding history. Collected and catalogued important library of books on typography.

Grabhorn, Edwin—Printer and designer. Born, Cincinnati, Ohio, 1889. Founded Studio Press, Indianapolis, 1916. Removed his business to San Francisco, 1918, now known as the Grabhorn Press. Printer of numerous books for Book Club of California, and many privately printed volumes. Noted for appreciation of values in type-designs, and for consistent work in support of classic tradition as guide and inspiration for modern work. His books notable for adherence to classical models in typography and format.

Taylor, Henry Huntly—Printer. Born, San Francisco, California. Associated with Edward DeWitt Taylor under firm name Taylor & Taylor, San Francisco, California. Graduate of Stanford University (Bachelor of Arts). Professional training at Graduate School of Business Administration, Harvard University (Master in Business Administration, 1914). Specialized in printing courses then offered, including Technique of Printing, and practise studies in typographic design in Business Practise in Printing, both under D. B. Updike. Summer months between school years spent in European printing centers. Author of short technical study on Comparative Basic Costs of Type-setting, etc., published in pamphlet form by Graduate School of Business Administration, Harvard University, 1916. War service, 1917-1919, Washington, D. C., and France. Appointed, for 1921, member of Committee of United Typothetæ of America on Bettering the Quality of Printing. Author of essay on The Problem of Bettering the Quality of Printing, published in Monotype for March-April, 1922. Recipient, with Edward DeWitt Taylor, in 1920, of two silver medals awarded by American Institute of Graphic Arts in connection with Exhibition of American Printing, one for Catalogue, etc., of Drawings and Etchings by Rembrandt, from the J. Pierpont Morgan Collection, and other for stationery exhibited. In 1920, firm printed Catalogue of the Loan Exhibition of Paintings by Old Masters, and in 1922, Catalogue of the Retrospective Loan Exhibition of European Tapestries, both published by San Francisco Museum of Art and included in the "Fifty Books of 1923," and "Fifty Books of 1924," traveling exhibitions of American Institute of Graphic Arts.

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Ashendene Press. See *Modern Period in England.*

Audenarde, 1473.

Augsburg, 1468, 1470, 1471, 1473, 1476, 1477, 1478, 1482, 1486, 1487, 1512, 1514, 1520.

Auriol, Georges. See *Modern Period in France.*

BAC, Govaert, 1496, 1500.

Bache, Benjamin Franklin, 1790.

Bamberg, 1457, 1461, 1481, 1507.

Bämler, Johann, 1476.

Barcelona, 1493.

Barckhusen, Herman, 1505.

Bartlett, Edward Everett. See *Modern Period in America.*

Basilae, Fadrique de, 1498, 1516.

Baskerville, John, 1750, 1757, 1758, 1761, 1762, 1764, 1784, 1785, 1789, 1807, 1827.

Basle, 1468, 1488, 1491, 1493, 1516, 1518, 1520, 1525.

Bassano, 1494.

Bay Psalm Book, 1640.

Beardsley, Aubrey. See *Modern Period in England.*

Beaumont Press. See *Modern Period in England.*

Behrens, Peter. See *Modern Period in Germany.*

Bellenger, Georges and Clément. See *Modern Period in France.*

Beltrand, Jacques. See *Modern Period in France.*

Belwe, Georg. See *Modern Period in Germany.*

Benedictis, Plato de, 1487.

Beraldi, Henri. See *Modern Period in France.*

Berners, Dame Juliana, 1486.

Bernhard, Lucian. See *Modern Period in Germany.*

Bernouard, François. See *Modern Period in France.*

Bewick, Thomas, 1780, 1790, 1795, 1796, 1797.

Bibles, 1450, 1456, 1457, 1460, 1462, 1476, 1483, 1491, 1514, 1516, 1522, 1534, 1539, 1558, 1564, 1572, 1655, 1657, 1658, 1663, 1685, 1743, 1776, 1782, 1791. See also *Modern Period in England.*

Biel, Friedrich, 1498, 1516.

Binny, Archibald, 1796, 1807, 1809.

Blaubirer, Johann, 1482.

Bodoni, Giambattista, 1768, 1771, 1772, 1780, 1785, 1788, 1789, 1791, 1793, 1802, 1807, 1813, 1819.

Boekholt, Abraham, 1698.

Bogeng, G. A. E. See *Modern Period in Germany*.

Bologna, 1487.

Bonfils, Robert. See *Modern Period in France*.

Books of Hours, 1497, 1511, 1525.

Boston, 1689, 1693, 1706, 1717, 1718, 1719, 1721, 1723.

Bowyer, William, 1722.

Boydell Shakspeare, 1786.

Bradford, Andrew Sowle, 1712, 1714, 1719.

Bradford, William, 1663, 1685, 1686, 1687, 1688, 1693, 1694, 1709, 1712, 1725, 1728, 1739, 1752.

Bradford, William II, 1742, 1753, 1754.

Bradley, Will. See *Modern Period in America*.

Bradley, William Aspenwall. See *Modern Period in America*.

Brandis, Lukas, 1475.

Brangwyn, Frank. See *Modern Period in England*.

Breda, Jacob van, 1473, 1493.

Breitkopf, Johann, 1755.

Breydenbach, Bernhard von, 1486.

Brocario, Arnaldi Gulielmi de, 1514.

Bruges, 1475, 1480.

Brussels, 1473, 1493.

Bullen, Henry Lewis. See *Modern Period in America*.

Bulmer, W., 1786, 1795, 1796, 1797, 1807.

Burger, Karl. See *Modern Period in Germany*.

Burgos, 1516.

Burlington, 1687.

Burne-Jones, Edward, 1853, 1859. See also *Modern Period in England*.

Buschmann, Joseph-Ernest, 1842, 1880.

Calixtus III, 1456.

Cambridge, 1638, 1640, 1642, 1643, 1645, 1646, 1648, 1649, 1650, 1651, 1652, 1654, 1655, 1656, 1657, 1658, 1663, 1664, 1666, 1669, 1685.

Campbell, John, 1704.

Carr, Horace. See *Modern Period in America*.

Caslon, William, 1716, 1722, 1734, 1750, 1758, 1763, 1764, 1766, 1785, 1790, 1821, 1844.

Catholicon, 1460.

Caxton, William, 1471, 1472, 1475, 1476, 1477, 1491, 1682.

Champ fleury, 1529.

Chepman, Walter, 1508.

Chiswick Press, 1810, 1844, 1889.

Christian, Arthur. See *Modern Period in France*.

Cissarz, Johann Vincenz, See *Modern Period in Germany*.

Cleland, Thomas M. See *Modern Period in America*.

Clement V, 1460.

Cobden-Sanderson, T. J. See *Modern Period in England*.

Colines, Simon de, 1497, 1520, 1521, 1526, 1529, 1534, 1536, 1544, 1567.

Collins, Isaac, 1791.

Cologne, 1440, 1467, 1470, 1472, 1479, 1499.

Columbiad, The, 1807.

Columbus, Christopher, Letter of, 1493.

Complutensian Polyglot Bible, 1514.

Congress, Proceedings of, 1824, 1833, 1834, 1873.

Coster, Lourens Janszoon, 1440.

Cottrell and Jackson, 1757, 1759.

Cranach, Hans, 1522.

Crane, Walter, 1894, 1896. See also *Modern Period in England.*

Cranmer, Bishop, 1539.

Crantz, Martin (Kranz), 1470, 1473, 1476

Cremer, Henry, 1456.

Crès, Georges. See *Modern Period in France.*

Cromburger, Jacob, 1527, 1539.

Cuesta, Juan de la, 1605.

Currier, Everett. See *Modern Period in America.*

Czeschka, C. O. See *Modern Period in Germany.*

Daniel Press, 1845, 1877.

Day, John, 1546, 1559, 1563, 1570.

Daye, Matthew, 1646, 1648.

Daye, Stephen, 1638, 1640, 1642, 1643, 1645.

Daye, Stephen, Press of, 1781, 1783. See also *Stephen Daye.*

Decor Puellarum, 1469, 1471.

Delft, 1473, 1520.

Denis, Maurice. *See Modern Period in France.*

Deventer, 1473, 1493, 1496.

De Vinne, Theodore Low. See *Modern Period in America.*

Didot establishment, 1689, 1713, 1737, 1783, 1786, 1801, 1819.

Discovery of America (announced), 1493.

Dodge, Philip Tell. See *Modern Period in America.*

Don Quixote, 1605, 1780.

Dorp, Rolant van den, 1497.

Doves Press. See *Modern Period in England.*

Draeger Frères, 1887. See also *Modern Period in France.*

Drugulin, W. See *Modern Period in Germany.*

Dürer, Albrecht, 1491, 1498, 1511, 1525, 1528.

Dwiggins, W. A. See *Modern Period in America.*

Eckmann, Otto. See *Modern Period in Germany.*

Egenolff, Christian, 1528, 1530, 1534, 1537, 1592, 1735.

Eggestein, Heinrich, 1466.

Ehmcke, F. H. See *Modern Period in Germany.*

Eliot, John, 1654, 1655, 1658, 1663, 1666, 1669, 1685.

Elzevir Press, 1583, 1595, 1625, 1634, 1635, 1636, 1638, 1642, 1648, 1654, 1655, 1669, 1675, 1681.

Enschedé Type-foundry, 1768.

Ephrata, Die Bruderschaft in, 1748.

Eragny Press. See *Modern Period in England.*

Erasmus, 1491, 1516.

Essex House Press. See *Modern Period in England.*

Estienne, Henri. 1497, 1502, 1520.

Estienne, Robert, 1527, 1544, 1551.

Estienne, Robert II, 1561.

Euphorion-Verlag. See *Modern Period in Germany.*

Eusebius (Jenson), 1470.

Falké, Pierre. See *Modern Period in France.*

Fell, Dr. John, 1668, 1672.

Fell type, 1668, 1672, 1877.

Filser-Verlag. See *Modern Period in Germany.*

First Bible
in world, 1450
in France, 1476.
in octavo, 1491.
Polyglot, 1514.
by Luther, 1522.
in American Indian language, 1663.

First Bible—*Continued*
in America in a current language, 1743.
in America in German, 1743.
in America in Gothic type, 1743.
in America in English, 1782.

First Book
by Gutenberg, 1445.
with printer's name, place and date, 1457.
with date and woodcuts, 1461.
in Roman type, 1464.
in Italy, 1465.
in Venice, 1469.
by Nicolas Jenson, 1470.
in France, 1470.
in Venice, in Gothic type, 1473.
by Jenson in Gothic, 1475.
by William Caxton, 1475.
with decorated title-page, 1476.
with title-page giving author, printer, place and date, 1476.
in England, 1477.
by Aldus Manutius, 1494.
in Italic, 1501.
in Scotland, 1508.
in England in Roman, 1518.
in New World, 1539.
in North America, 1640.
in English in the New World, 1640.
in Philadelphia, 1688.
in Connecticut, 1709.

First Printed
date, 1454.
color, 1457.
polemic, 1462.
title-page, 1463.
advertising circular, 1466.
copper-plate illustration, 1477.
specimen sheet, 1486.
announcement of Discovery of America, 1493.
music from types, 1495.
Shakespeare (quarto), 1593.
Don Quixote, 1605.
Shakespeare (folio), 1623.
book-plate in America, 1642.
edition of Mother Goose, 1719.

First Printing
in Netherlands (claimed), 1440.
in Germany, 1450.
in Italy, 1465.
in France, 1470.
in Netherlands (established), 1473.
in Spain, 1474.
in England, 1476.
in Portugal, 1487.
in New World, 1539.
in Mexico, 1539.
in Peru, 1584.
in North America, 1638.
in Cambridge, 1638.

Fleet, Thomas, 1719.

Fleishman, John Michael, 1728, 1734.

Florence, 1477, 1495.

Florian, Ernest and Frédéric. See *Modern Period in France.*

Floury, H. See *Modern Period in France.*

Formschneyder, Hieronymus, 1525, 1528.

Fournier establishment, 1737, 1742, 1766, 1790.

Frankfort, 1509, 1530, 1537, 1564, 1592, 1735.

Franklin, Benjamin, 1706, 1717, 1718, 1719, 1721, 1723, 1724, 1727, 1728, 1729, 1732, 1742, 1757, 1760, 1790.

Franklin, James, 1717, 1718, 1719.

Fraser, Claud Lovat. See *Modern Period in England.*

French, George. See *Modern Period in America.*

Freyburger, (Freiburger), Michael, 1470 1473, 1476.

Froben, John, 1491, 1516, 1518, 1520, 1525.

Froment, Emile and Eugène. See *Modern Period in France.*

Fry and Kammerer, 1807.

Fry, Joseph, 1764.

Fuhrmann, George Leopold, 1616.

Furtner, Michael, 1493.

Fust and Schöffer, 1457, 1459, 1460, 1462, 1463, 1465.

GANDY, Lewis C. See *Modern Period in America.*

Garamond, Claude, 1497, 1536, 1541, 1544, 1567, 1592, 1642.

Garnett, Porter. See *Modern Period in America.*

Gering, Ulrich, 1470, 1473, 1476.

Germantown, 1735, 1739, 1743, 1772.

Gerstung, Wilhelm. See *Modern Period in Germany.*

Geyssler, Valentin, 1561.

Ghent, 1473.

Gil, Geronimo, 1780.

Gilliss, Walter. See *Modern Period in America.*

Giraldi, Pedro, 1493.

Giraldon, Adolphe. See *Modern Period in France.*

Giunta, Filippo, 1489.

Giunta, Luc Antonio, 1489, 1503, 1527.

Glover, Jesse, 1638.

Goodhue, Bertram Grosvenor. See *Modern Period in America.*

Gouda, 1473.

Goudy, Frederic William. See *Modern Period in America.*

Gourmont, Gilles de, 1529.

Grabhorn, Edwin. See *Modern Period in America.*

Granjean, Philippe, 1693, 1740, 1745.

Granjon, Robert, 1558, 1567, 1578, 1592.

Grasset, Eugène, 1883. See also *Modern Period in France*, and *in Germany.*

Green, Samuel, 1648, 1649, 1650, 1651, 1652, 1654, 1655, 1656, 1657, 1658, 1663, 1664, 1685.

Green, Timothy, 1709.

Gregoriis, Joannes and Gregorius de, 1493, 1494.

Gress, Edmund G. See *Modern Period in America.*

Grieninger, Johannis, 1502.

Grolier Club, 1884, 1885, 1886, 1889.

Grolier, Jean, 1479, 1510, 1515, 1545.

Guérin, Charles. See *Modern Period in France.*

Gusman, Pierre. See *Modern Period in France.*

Gutenberg, Johannes, 1440, 1444, 1447, 1454, 1456, 1460, 1468.

HAARLEM, 1440, 1473, 1493, 1768.

Haebler, Konrad. See *Modern Period in Germany.*

Hagenbach, Peter, 1504.

Hague, 1687.

Hain, Ludwig, 1826.

Han, Ulrich, 1467.

Harris, Benjamin, 1693.

Hasselt, 1473.

Heintzemann, Carl H. See *Modern Period in America.*

Helleu, R. See *Modern Period in France.*

Henrick (die lettersnider), 1493, 1496, 1520.

Hertogenbosch, 1473.

Heyder, Fritz. See *Modern Period in Germany.*

Hiersemann, Karl W. See *Modern Period in Germany.*

Hildreth, E. L. See *Modern Period in America.*

History of Printing in America, 1810.

Holbein, Hans, 1491, 1518, 1520, 1522, 1525.

Holl, Leonhard, 1482.

Holtrop, J. W., 1857.

Hölzel, Hieronymus, 1511.

Hölzl, Emil. See *Modern Period in Germany.*

Homberch, Henrick Eckert van, 1498, 1505.

Hopfer, Daniel, 1520.

Hornby, St. John. See *Modern Period in England.*

Horne, Herbert P. See *Modern Period in England.*

Hunter, Dard. See *Modern Period in America.*

Hupp, Otto. See *Modern Period in Germany.*

Hurus, Juan and Pablo, 1500.

Hyperion-Verlag. See *Modern Period in Germany.*

IBARRA, Joachin, 1772, 1780.

Imprimerie Nationale. See *Modern Period in France.*

Imprimerie, Royale, 1640, 1642, 1657, 1693, 1702, 1740, 1745.

Incunabula, Reference Works about, 1793, 1796, 1826, 1857. *Modern Period in England*, 1898. *Modern Period in Germany*, 1892, 1904, 1905, 1907, 1914, 1916, 1919, 1924, 1925.

Indian Bible (Eliot), 1658, 1663, 1685.

Indian Catechism (Eliot), 1654.

Indian Grammar (Eliot), 1666.

Indian Gospels (Eliot), 1655.

Indian Primer (Eliot), 1669.

Indian Psalms (Eliot), 1658.

Insel-Verlag. See *Modern Period in Germany.*

JACOBY-BOY. See *Modern Period in Germany.*

Janus Presse. See *Modern Period in Germany.*

Jenson, Nicolas, 1470, 1471, 1474, 1475, 1476, 1479, 1480, 1488.

Johnson, Henry Lewis. See *Modern Period in America.*

Johnson, Marmaduke, 1663, 1664, 1666.

Johnston, Edward. See *Modern Period in England.*

Jones, George W., 1887, 1889. See *Modern Period in England.*

Jou, Louis. See *Modern Period in France.*

Jouas, Charles. See *Modern Period in France.*

Jugend. See *Modern Period in Germany.*

KEIMER, Samuel, 1723, 1727, 1728.

Kelmscott Manor, 1871.

Kelmscott Press. See *Modern Period in England.*

Kennerley, Mitchell. See *Modern Period in America.*

Kerver, Thielman, 1497, 1509, 1512.

Kieffer, René. See *Modern Period in France.*

Kippenberg, Anton. See *Modern Period in Germany.*

Kistler, Bartholomaeus, 1493.

Kistner and Siegel. See *Modern Period in Germany.*

Kleukens, F. W. See *Modern Period in Germany.*

Klingspor, Dr. Karl. See *Modern Period in Germany.*

Knoblochtzer, Heinrich, 1477.

Koberger, Anton, 1480, 1483, 1491, 1493, 1498.

Koch, Rudolf. See *Modern Period in Germany.*

Koelhoff, Johann, 1472.

König, Heinz. See *Modern Period in Germany.*

Koster, Lourens Janszoon, 1440.

Kranz (Crantz), Martin, 1470, 1473, 1476.

Kuilenburg, 1473.

LAHURE, Maison. See *Modern Period in France.*

Lane, John. See *Modern Period in England.*

Lechter, Melchior. See *Modern Period in Germany.*

Leeu, Gerard, 1473.

Leipzig. See *Modern Period in Germany.*

Lenox, James (Gutenberg Bible), 1456.

Lepère, Auguste. See *Modern Period in France.*

Leyden, 1473, 1497, 1511, 1583, 1635.

Lima, 1584.

Lirar, Thomas, 1486.

Lithography, 1796, 1799.

Löslein, Peter, 1476, 1477, 1483.

Lotter, Melchior, 1522.

Louvain, 1473.

Lübeck, 1475.

Luce, Louis, 1693, 1740.

Luther family (type-founders), 1530, 1735.

Luther, Martin, 1522, 1564.

Lyons, 1473, 1478, 1480, 1487, 1556, 1558, 1563, 1584.

MADRID, 1605, 1772, 1780.

Mainz, 1444, 1454, 1456, 1457, 1458, 1459, 1460, 1463, 1465, 1479, 1485, 1486, 1499, 1509.

Mainz, Sack at, 1462.

Maler, Bernhard, 1476, 1477.

Mansion, Colard, 1473, 1493.

Manutius, Paul, 1562.

Mappa, Adam, 1791.

Marchant, Guyot, 1493.

Marchbanks, Hal. See *Modern Period in America.*

Marées-Gesellschaft. See *Modern Period in Germany.*

Martens, Thierry, 1493.

Martin, William, 1786, 1795, 1797.

Marty, A. E. See *Modern Period in France.*

Mather, Cotton, 1689, 1693.

Mather, Increase, 1689.

Maximilian, Emperor, 1508.

Mazarin, Cardinal, 1456.

McMurtrie, Douglas C. See *Modern Period in America.*

Mecom, B., 1760.

Medici, Cardinal de, 1578.

Medici Society. See *Modern Period in England.*

Mentelin, Johann, 1460, 1477.

Meredith, Hugh, 1728.

Mergenthaler, Ottmar. See *Modern Period in America.*

Meslier, Denis, 1495.

Mexico, 1539.

Moeretorf, Jean, 1555.

Monteregio, 1474, 1476.

Morel, Guillaume, 1558.

Moretus, Edouard, 1876.

Moretus (Moeretorf), Jean, 1555.

Mori, Gustav. See *Modern Period in Germany.*

Morison, Stanley. See *Modern Period in England.*

Mornay, G. and A. See *Modern Period in France.*

Morris, William, 1834, 1853, 1859, 1871, 1889. See also *Modern Period in England.*

Moxon, Joseph, 1683.

Müller, Johannes, 1474, 1476.

Munder, Norman T. A. See *Modern Period in America.*

Myllar (Miller), Andrew, 1508.

NASH, John Henry. See *Modern Period in America.*

Nelson, Robert Wickham. See *Modern Period in America.*

Neumeister, Johann, 1479, 1487.

New London, 1709.

New York, 1686, 1693, 1694, 1709, 1725, 1728, 1791.

Nicholas, V, 1454.

Nicholls, Nicholas, 1665.

Nicol, George, 1786.

Nijmegen, 1473.

Nuremberg, 1474, 1480, 1483, 1491, 1493, 1498, 1511, 1514, 1517, 1525, 1528, 1561, 1616, 1793.

Nuremberg Chronicle, 1493.

OFFENBACH Werkstätten. See *Modern Period in Germany*.

Olpe, Bergmann von, 1493, 1494.

Orcutt, William Dana. See *Modern Period in America*.

Oswald, John Clyde. See *Modern Period in America*.

Oxford University Press, 1585, 1668, 1672, 1693.

PABLOS, Juan, 1539.

Pacioli, Luca, 1509.

Paderborn, Johann von, 1473.

Padua, 1473.

Paffraet, Richard, 1473.

Palmart, Lambert, 1474.

Pannartz, Arnold, 1465, 1467, 1468, 1469.

Panzer, G. W., 1793.

Paris, 1470, 1473, 1476, 1477, 1488, 1493, 1495, 1497, 1502, 1512, 1520, 1521, 1525, 1527, 1529, 1534, 1536, 1544, 1551, 1558, 1560, 1561, 1640, 1642, 1657, 1693, 1702, 1713, 1737, 1740, 1745, 1766, 1783, 1786, 1801, 1819, 1882, 1883. See also *Modern Period in France*.

Parker, James and Company, 1757.

Parma, 1768, 1771, 1780, 1785, 1789, 1791, 1793, 1802, 1813.

Parsifal, 1477.

Peignot, Georges and André. See *Modern Period in France*.

Pelletan, Édouard. See *Modern Period in France*.

Pennell, Joseph, 1889.

Petreius, Johann, 1525.

Petri, Adam, 1520.

Pfeil, Johann, 1507.

Pfister, Albrecht, 1461.

Pflanzmann, Jodocus, 1470.

Philadelphia, 1686, 1688, 1712, 1719, 1723, 1727, 1728, 1729, 1742, 1754, 1782, 1790, 1796, 1807, 1809.

Pichon, Léon. See *Modern Period in France*.

Pickering, William, 1821, 1827, 1844.

Pictor, Bernard, 1476, 1477.

Pigouchet, Philippe, 1488.

Pine, John, 1733.

Pissarro, Lucien. See *Modern Period in England*.

Planes, Miguel de, 1493.

Plannck, Stephen, 1493.

Plantin, Christopher, 1555, 1559, 1567, 1572, 1867, 1876.

Plantin Museum, 1867, 1876.

Poeschel, Carl Ernst. See *Modern Period in Germany*.

Point System, 1737, 1878, 1886.

Pollard, A. W. See *Modern Period in England*.

Polyglot Bibles, 1514, 1572, 1657.

Portesia, Bartolomio de Zani da, 1497.

Portugal, 1487.

Posa, Pedro, 1493.

Proctor, Robert. See *Modern Period in England*.

Propyläen-Verlag. See *Modern Period in Germany*.

Prüss, Johann, 1488.

Psalterium, Mainz, 1457.

Pulcria Biblia, 1462.

Pynson, Richard, 1493, 1494, 1495, 1518, 1521, 1526.

Quentell, Heinrich, 1479.

Ratdolt, Erhard, 1476, 1477, 1480, 1482, 1483, 1486, 1487, 1498, 1505.

Ratio-Presse. See *Modern Period in Germany*.

Regensburg, 1470.

Regiomontanus, 1474, 1476.

Reigate Press. See *Modern Period in England*.

Reuwich, Erhard, 1486.

Reyser, Georg, 1482.

Riccardi Press. See *Modern Period in England*.

Ricketts, Charles. See *Modern Period in England*.

Ricketts and Shannon. See *Modern Period in England*.

Rodin, Auguste. See *Modern Period in France*.

Rogers, Bruce. See *Modern Period in America*.

Roland-Verlag. See *Modern Period in Germany*.

Rollins, Carl Purington. See *Modern Period in America*.

Rome, 1467, 1468, 1493, 1562, 1578, 1587, 1590, 1610, 1628.

Ronaldson, James, 1796, 1809.

Rossetti, Dante Gabriel, 1859.

Roy, Guillaume Le, 1473, 1480.

Rudge, William Edwin. See *Modern Period in America*.

Ruppel, Berthold, 1468.

Rusch, Adolph, 1464.

Saragossa, 1500.

Sattler, Joseph. See *Modern Period in Germany*.

Sauer, Christopher, 1735, 1739, 1743.

Sauer, Christopher II, 1772, 1776.

Scheldt, Jacob, 1687.

Schiedam, 1473.

Schöffer, Johann, 1509.

Schöffer, Peter, 1456, 1459, 1484, 1485, 1486.

Schönsperger, Hans, 1520.

Schönsperger, Johann, 1508, 1512, 1514, 1517.

Schoonhoven, 1473, 1496.

Senefelder, Alois, 1796, 1799.

Sensenschmidt, Johann, 1481.

Serlio, Sebastian, 1537.

Seversz, Jan, 1511.

Seville, 1527, 1539.

Seymour, Ralph Fletcher. See *Modern Period in America*.

Shakespeare, William, 1593, 1623.

Shakspeare Press, 1786, 1795, 1797.

Sherbow, Benjamin. See *Modern Period in America*.

Silber, 1493.

Simplicissimus. See *Modern Period in Germany*.

Sixtus V, 1587.

Société Artistique du Livre Illustré. See *Modern Period in France*.

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Specimens, Sheets and Books, 1486, 1525, 1561, 1567, 1592, 1616, 1628, 1665, 1681, 1693, 1734, 1757, 1762, 1763, 1771, 1785, 1790, 1809, 1813, 1819, 1833.

Speyer, 1471, 1472.

Speyer, Johannes, 1469, 1470.

Speyer, Wendelin, 1469, 1470, 1473.

St. Albans, Book of, 1486.

St. Albans, Schoolmaster of, 1486.

Stampa Vaticana, 1587, 1610, 1628.

Stamperia Reale, 1768, 1771, 1780, 1785, 1789, 1791, 1793, 1802, 1813.

Star Chamber Decree, 1637.

Steglitzer Werkstatt. See *Modern Period in Germany*.

Steiner-Prag, Hugo. See *Modern Period in Germany*.

Stempel Schriftgiesserei. See *Modern Period in Germany*.

Stendal, Albert von, 1473.

Stephenson, Blake & Company, 1757, 1759.

Strassburg, 1460, 1464, 1466, 1477, 1488, 1493, 1499, 1502, 1528.

Strawberry Hill Press, 1758.

Subiaco, 1465, 1467.

Sütterlin, Ludwig. See *Modern Period in Germany*.

Sweynheym, Conrad, 1465, 1467, 1468, 1469.

TAYLOR, Henry Huntly. See *Modern Period in America*.

Teague, Walter Dorwin. See *Modern Period in America*.

Tempel-Verlag. See *Modern Period in Germany*.

Ther Hoernen, Arnold, 1470.

Thomas, Isaiah, 1785, 1789, 1791, 1810.

Tiemann, Walter. See *Modern Period in Germany*.

Tinayre, Julian. See *Modern Period in France*.

Toledo, 1504.

Torresani, Andrea de, 1480, 1483, 1488, 1499.

Tory, Geofroy, 1480, 1497, 1509, 1518, 1520, 1525, 1526, 1527, 1529, 1530, 1536, 1558.

Tournes I, Jean de, 1556, 1558, 1563.

Tournes II, Jean de, 1584.

Tours, 1555.

Trenton, 1791.

Turrecremata, Cardinal, 1467.

ULM, 1473, 1482, 1486.

Updike, Daniel Berkeley. See *Modern Period in America*.

VALDARFER, Christopher, 1470.

Vale Press. See *Modern Period in England*.

Valladolid, 1493.

Van Dijk, Christoffel, 1654, 1672, 1681.

Vascosan, Michael, 1560.

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Verona, 1472, 1479.

Vespucci, Amerigo, 1505.

Vettiner, J. B. See *Modern Period in France*.

Vierge, Daniel, 1882. See also *Modern Period in France*.

Vinci, Leonardo Da, 1509.

Vogeler, Heinrich. See *Modern Period in Germany*.

Vollard, Ambroise. See *Modern Period in France*.

Voskens, Dirck, 1672.

Vostre, Simon, 1488.

Voulliéme, E. See *Modern Period in Germany*.

WALKER, Emery. See *Modern Period in England*.

Walpole, Horace, 1758.

Walton, Brian, 1657.

Warner, Philip Lee. See *Modern Period in England*.

Weiss, E. R. See *Modern Period in Germany*.

Wenssler, Michael, 1488.

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Whitchurch and Grafton, 1539.

Whittinghams, The (Charles), 1810, 1844.

Wieynk, Henry. See *Modern Period in Germany*.

Wilson, Alexander and Son, 1833.

Wittenberg, 1522.

Woerden, Hugo Janssoen van, 1497.

Wohlgemuth, Michael, 1491, 1493.

Wolf, Jacob, 1493.

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XIMENES, Cardinal, 1504, 1514.

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Zell, Ulrich, 1467.

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